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ABSTRACT

Training programs are often linked to current demand and are unable to adjust to changing needs rapidly enough to provide an equilibrium in worker supply and demand. To help with planning for future needs, the information contained in this report covers preliminary employment projections to 1980, by industry and by occupation, for the State of Texas. Population growth in Texas is expected to continue at a rapid rate, as is industrial growth, and the participation rate of potential labor force members to total employment has increased substantially. The report includes tables of 1970 employment by detailed industry with projections to 1976 and 1980; employment and projected employment by occupation; and projected job openings by occupation for 1976. Employment trends by industry and by occupation are also discussed. (MF)

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CHANGING HORIZONS

A PROFILE OF JOBS TO 1980

U S DEPARTMENT OF HEALTH
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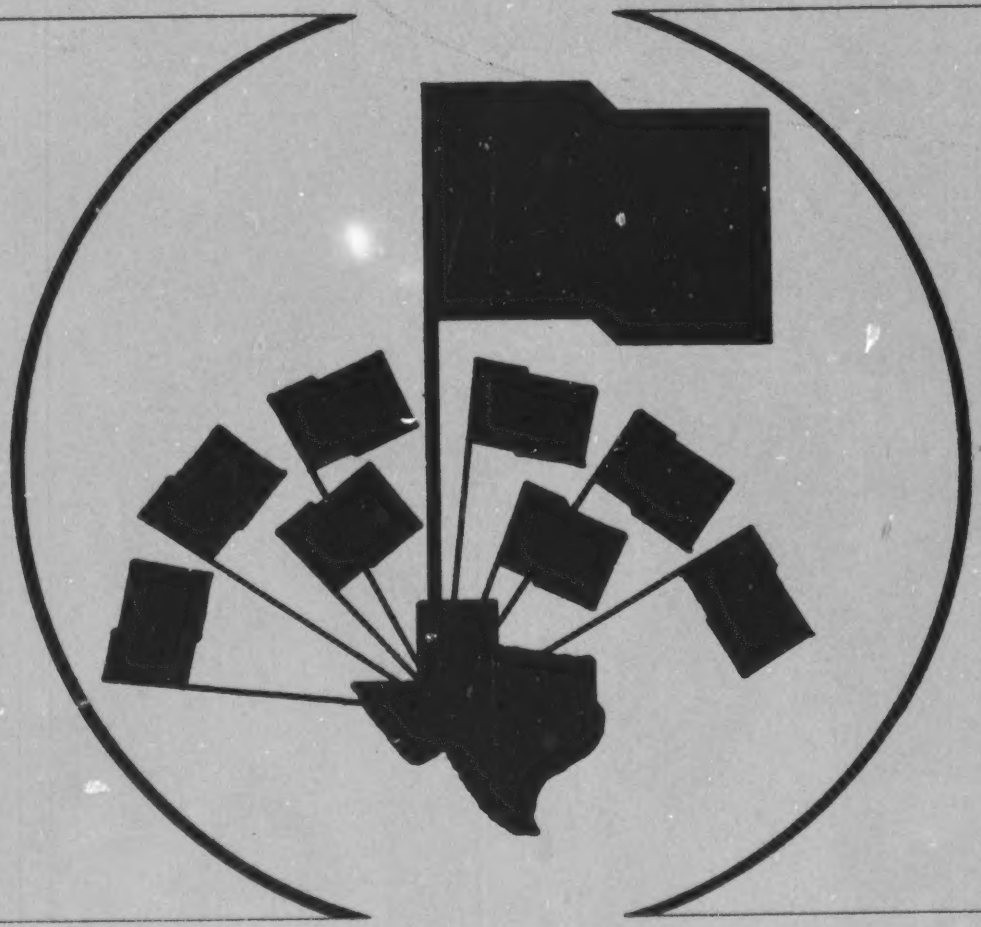

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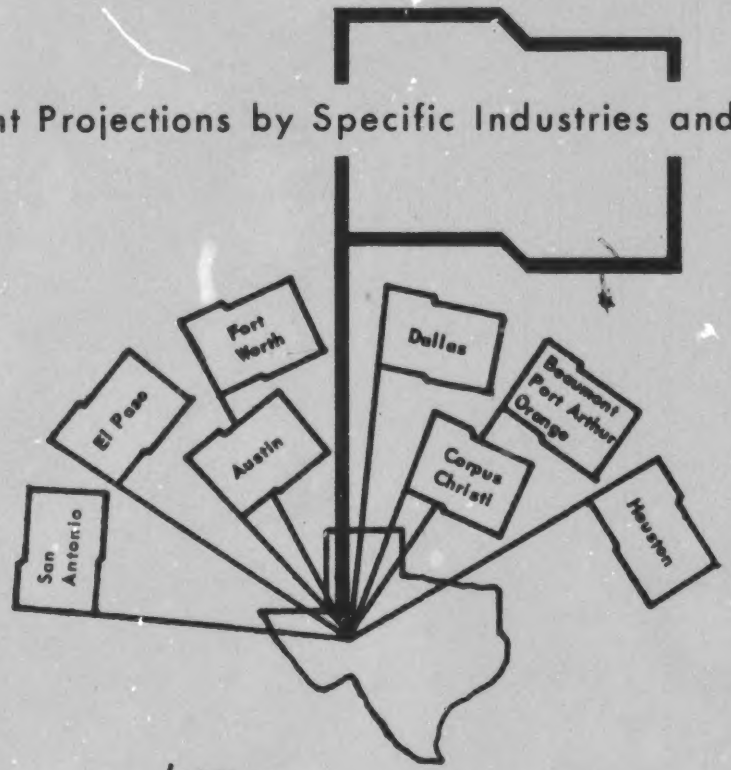
CHANGING HORIZONS

A PROFILE OF JOBS TO 1980

Employment Projections by Specific Industries and Occupations



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INTRODUCTION

INTRODUCTION

Planning for tomorrow remains one of the primary concerns of leaders in government, education, and private industry. Without some insight into the needs of the future, the training of available manpower becomes little more than guesswork. In the past, the lack of occupational information has presented a real problem for planners at all levels. New programs are always being introduced to try to alleviate some of the shortcomings, but much remains to be done to provide good occupational information. The data found in this publication was produced through one of these programs; it is hoped that this effort will help with planning for the future.

The training of tomorrow's workers has become no simple task. All too often, training programs are linked to current demand and are unable to adjust to changing needs rapidly enough to keep pace. An equilibrium in worker supply and demand must be sought to relieve the pressure on an already overburdened labor force.

The rapid growth of Texas is adding to the urgency for good comprehensive planning. A current picture of the labor force is simply inadequate for long-range planning of manpower programs. Skills that require a relatively long "lead time" or training period furnish an excellent example of current information's inadequacies. Therefore, it is in the best public interest that unfilled employment opportunities caused by a lack of qualified applicants be identified as soon as possible, and that persons who can be qualified for these positions through education and training be sought out and trained as quickly and as reasonably as possible.

The information contained in this report covers preliminary employment projections to 1980, by industry and by occupation, for Texas. Computerized data development was accomplished through the Interim Manpower Projection Project which utilized the national industry-by-occupation matrices for 1970 and 1980, 1970 Census data for Texas, and Texas industry employment estimates.

The actual computer operations were handled by the Lawrence Berkeley Laboratories. Matrices consisted of individual data cells for 421 different occupations in each of 201 separate industries. Each matrix was summed, in turn, to arrive at the "total employment by industry" and "total employment by occupation" tables contained in this report.

Certain assumptions concerning economic conditions must be made to form a base for employment projections, even though these forecasts are often subject to revision. The assumptions used in making the interim projections contained in this publication were: (1) the institutional framework of the American economy will not change radically; (2) economic, social, technological, and scientific advances will continue, with additional emphasis being placed on education, income, and leisure; (3) efforts to solve major domestic challenges such as those associated with air and water pollution, urban congestion, and energy shortages may require more of our resources, but they will have only a marginal effect on long-term economic growth; (4) manpower training and educational programs will achieve a satisfactory balance between labor supply and demand, permitting thereby the achievement of a stable, long-term economic growth-rate.

Since the assumptions mentioned above all relate to a long-range, stable economic situation, reference should be made to the short-term occurrences that cannot be considered in a project of this nature. The projection methods are unable to take into account cyclical, seasonal, or such other factors as sudden openings or closings of large plants, except in selected cases where manual adjustments were made to 1976 estimates. Moreover, the national projections used in the development of these projections do not reflect the implications or effects on future employment of such things as "energy crises" or "economic slumps". It is acknowledged that any or all of these situations can affect future employment levels, but it is hoped that most short-term occurrences balance themselves out over a long period.

If population tends to expand in areas of strong economic growth, the population in Texas should continue expanding at a rapid rate. In addition to a natural increase caused by a birth rate that

is higher than the death rate, the anticipated increases in job opportunities during the 1970's will enable the State's population to grow at an even faster rate than during the 1960's. In addition, migration into the State will also be increased by the further development of Texas as an attractive retirement location as well as an industrial site.

Population growth in Texas is expected to remain very rapid, in order to keep pace with industrial growth. At present, the State is among the leaders in the country in actual growth; it also has a growth rate greater than that of the nation as a whole. Much of this growth can be attributed to the excellent conditions for greater industrialization found throughout the State.

Today, only members of the population 16 years of age and older are considered to be potential labor force participants. In the recent past, 14-and-15-year-olds were also included, but, in today's economy, it is no longer felt that this is the general rule. Because of this change in concept, the participation rate of potential labor force participants to total employment has increased substantially. This change in concept must be considered when comparing past rates to the ones presented here. Under this new definition, some 59.9 percent of the State's population, 16 years of age and over, participated in the labor force in 1970, but only 58.4 percent of this same group will be needed to meet the 1980 labor force demand.

EMPLOYMENT TRENDS BY INDUSTRY

EMPLOYMENT TRENDS BY INDUSTRY

In recent decades, a definite trend has emerged as the Texas labor force expands. A growing portion of employment has shifted from goods-producing to service-producing industries. In the 1970-1980 decade, the percentage of employment in service-producing industries will increase 27.6 percent. The Services Industry alone comprised over 40.3 percent of total service-producing industries in 1970; by 1980, its share will increase to 42.4 percent.

Our constantly expanding economy has come to require and depend upon various business and personal services for convenience. As business organizations become more and more complicated, they will rely on the specialized services (legal, business, medical, educational) needed in their day-to-day operations. As shown in Chart 1, over 69 percent of total industry employment will, by 1980, be concentrated in the service-producing industries--Transportation, Communication, and Utilities; Wholesale and Retail Trade; Finance, Insurance and Real Estate; Services and Miscellaneous; and Public Administration.

As employment swells in service-producing industries, growth in goods-producing industries is lagging. Between 1970 and 1980, the overall employment increase in goods-producing industries will be minimal--12.2 percent. Over 94 percent of the total net gain in the goods-producing industries can be attributed to Manufacturing. With employment cut by 79,200 in Agriculture, Forestry and Fisheries during the seventies, this industry's share of total employment fell from 6.2 percent in 1970 to only 3.6 percent in 1980. Mechanization and new methods for yielding larger crops have curtailed employment additions in this area.

The annual growth rate, previously 3.1 percent in the 1960-1970 decade, will fall to 2.2 percent

in the 1970-1980 decade. This slowdown in employment expansion is anticipated, as our economy experiences temporary cutbacks during the mid-1970's. The energy crisis, inflation, and food and raw material shortages are factors that will serve to limit growth in our nation as well as in Texas during the seventies.

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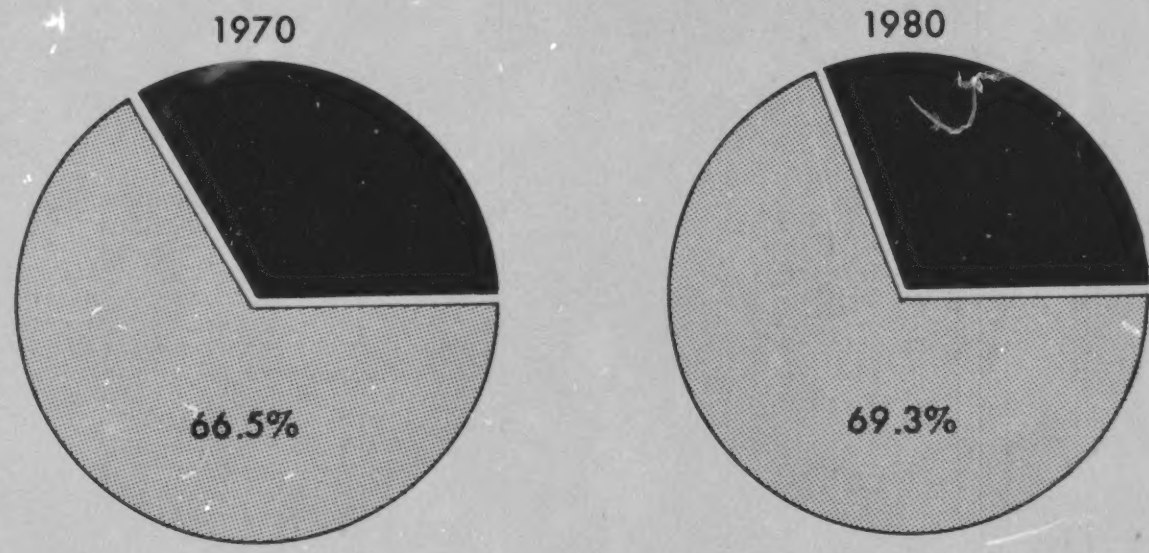
CHART 1

INDUSTRIAL SHIFT FROM 1970 TO 1980

Percent Distribution Of Goods-Producing
And Service-Producing Industries In Texas



Goods-Producing Industries – Agriculture, Forestry, & Fisheries; Mining; Contract Construction; & Manufacturing

Service Producing Industries – Transportation, Communications, & Public Utilities; Wholesale & Retail Trade; Finance, Insurance, & Real Estate; Services; & Public Administration

AGRICULTURE, FORESTRY, AND FISHERIES

Following the national pattern, employment in Agriculture, Forestry, and Fisheries industries (including agricultural production) is expected to show a slight curtailment in 1976, to 4.5 percent of the total industry employment for Texas. While labor-saving techniques continue to cause cut-backs in employment in this category, the return of farmland to productivity--in order to meet greater export demands--may slow the pace at which employment in the agricultural segment is declining. The downtrend should continue to 1980, but to a lesser degree than the national rate. Nevertheless, Agriculture, Forestry, and Fisheries is forecast to be the single Texas industry group in which the actual number of workers declines.

MINING

In 1970, there were 106,700 Texas workers employed in the Mining Industry. In this category, over 92 percent of the Texas employment is concentrated in the field of Petroleum and Natural Gas Production. While Texas Coal Mining has been relegated to a minor role in the past, recent demands resulting from fuel shortages necessitate employment growth in Coal Mining as well as in Oil and Natural Gas Production.

In order to meet these production needs, overall employment in this industry group is expected to experience a 9.2 percent upturn between 1970 and 1980. During this time span, industry employment should reach 111,400 by 1976, and 116,500 by 1980. Steady growth is expected in Mining, as long as the output quantities are insufficient to fill the need for these vital resources.

CONTRACT CONSTRUCTION

Total employment in Contract Construction was 310,100 in 1970. By 1976, the industry is expected to add 47,300 workers; by 1980, another 31,700--or a total increase of 79,000 over the 10-year period. As in the past, prospective construction activity appears promising for these reasons: population growth, industrial expansion, rising personal and corporate incomes, and government spending.

In this 1970-80 decade, prefabricated building materials and labor-saving techniques and equipment will tend to moderate growth in Contract Construction. During the mid-70's, temporary conditions that will serve to limit additions to employment are soaring construction costs, material shortages, and high interest rates. These economic considerations will slow expansion mainly in the residential construction sector of General Building Contractors. Despite these factors, growth in other segments of this industry group will offset any slowdown in new housing construction.

Texas construction activity is predicted to grow 25.5 percent by 1980--slightly faster than the national increase of 20.6 percent between 1970 and 1980. As new home building declines, more activity will shift to home improvement and remodeling in the General Building section. This area of construction is projected to grow 29.5 percent during the ten-year period--at a faster rate than any other segment of Contract Construction. Moderate expansion in heavy construction is anticipated, as government funds are made available for buildings, highways, and other installations.

The largest employment sector, Special Trade Contractors, will add 29,000 workers by 1980, as the need continues for painters, plumbers, carpenters, electricians, etc. As labor-saving devices come to be regarded as necessities, the installation of dishwashers, garbage-disposal units, central heating and air-conditioning, and other items of this nature will require additional workers

to satisfy the demand for these household conveniences. Even though construction will temporarily slow as a result of the economic downturn in the mid-70's, a steady growth in the construction industry should resume by the latter part of the decade. By 1980, total employment in construction should reach 389,100.

MANUFACTURING

Texas Manufacturing employment is forecast to move upward at a moderate pace. The largest gain will occur in the Durable Goods sector, with a substantial 1970-1980 growth rate of 25.9 percent; in comparison, there will be a lesser 17.0 percent upturn in Nondurable Goods. By 1980, Manufacturing workers in Texas will total 918,100. Total Manufacturing will account for 17.5 percent of Texas employment, the third largest major industry group in the State.

Unstable economic conditions will cause the seventies to be a decade of apparent inconsistencies. In Nondurable Goods, growth in the Food Industry will slow to a mere 3.1 percent, with the addition of only 2,700 workers by 1980. This modest growth is the result of several declining industries offsetting very pronounced growth in others. Downturns are expected in Dairy Products, Grain Mill Products, and Bakery Products, while expansion is anticipated for the Beverage Industry, Canning and Preserving, and Meat Products. Employees in the Food Industry will number 89,300 by 1980.

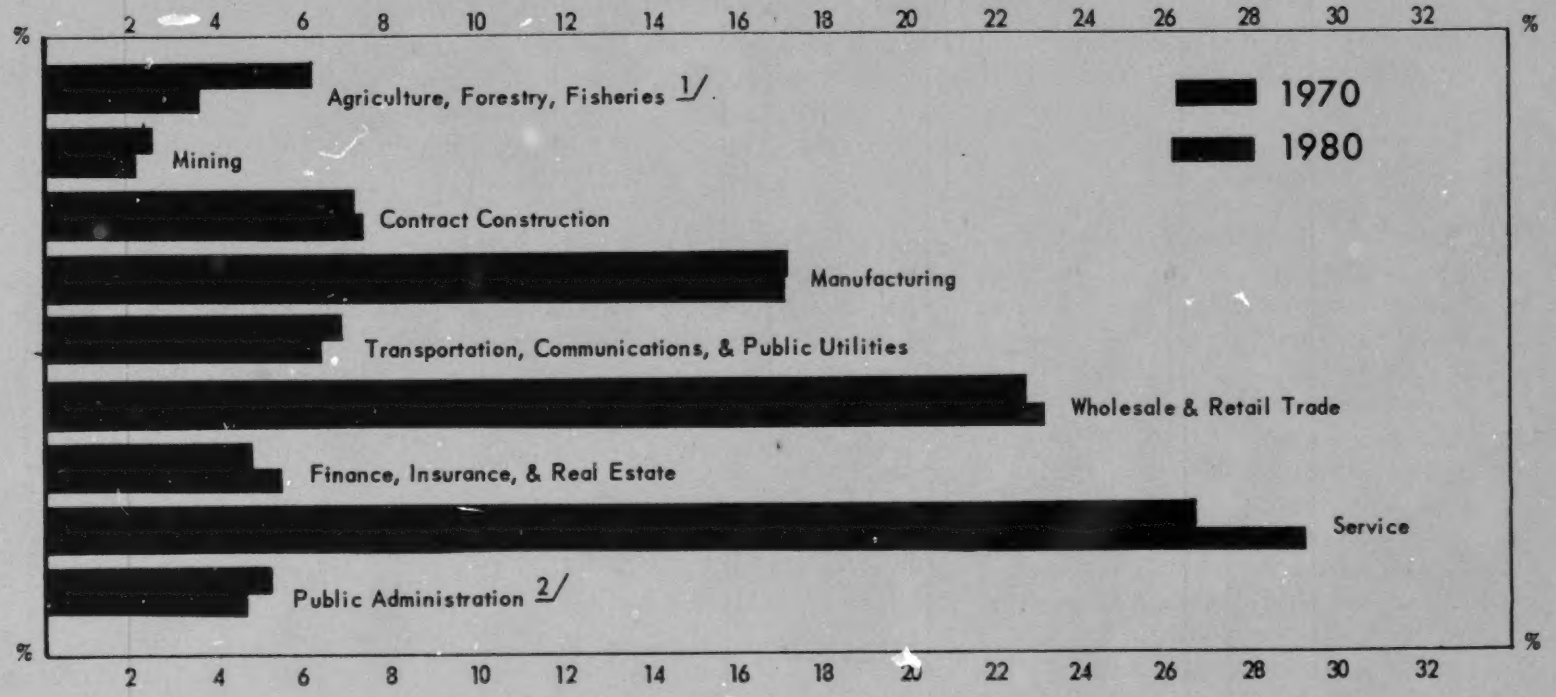
As a result of the Food Industry's limited growth, its spot as the largest employer in Durable Goods will be relinquished to Apparel and Fabricated Textile Products. During the seventies, employment in the Apparel and Fabricated Textile Products Industry will experience a sizeable expansion--48.9 percent. By 1980, this industry should employ 92,600 workers, which will amount to 23.4 percent of total employment in Nondurable Goods. Two industries, Leather Products and Petroleum and Coal Products, are expecting a reduction in employment; the remaining industries in Nondurables should show an upward movement in employment.

In Durable Goods, employment fluctuations will range from a 1.2 percent decrease in Transportation Equipment to a 64.0 percent advance in Stone, Clay, and Glass Products. Industries primarily responsible for the bulk of the projected increase include manufacturers of Machinery (electrical and non-electrical) and Stone, Clay, Glass Products.

Although most Manufacturing activity will not trigger spectacular growth between 1970 and 1980, three segments should record advances instrumental in achieving the overall 21.9 percent expansion expected for Total Manufacturing. The combined net gains in the Apparel and Fabricated Textiles Industry and Machinery (electrical and non-electrical) account for 50.5 percent of the total net change in the Manufacturing Group of Industries. With the ever-increasing utilization of computer-regulated machinery, manufacturers of these products and other new innovations can be assured of growing production demands. While these labor-saving tools tend to reduce employment growth in other establishments, the Machinery Industries involved in actually producing these devices should thrive. The manufacturing employment in Textile Machinery, for example, should be stimulated by rapid growth in the Apparel and Fabricated Textiles Industry. Since several Texas manufacturers of men's wearing apparel have gained a nation-wide market, employment in the Apparel and Fabricated Textiles Industry is soaring. At the same time, the Oil Field Tools and Equipment Industry is also climbing, as fuel producers operate at full capacity to satisfy market demands.

CHART 2

PERCENT DISTRIBUTION OF EMPLOYMENT BY MAJOR INDUSTRY GROUPS IN TEXAS, 1970 AND 1980



1/ Includes Agricultural Production As Well As Agricultural Services, Forestry, & Fisheries.

2/ Includes Government Workers Engaged In Activities Unique To Government. Those Workers Engaged In Activities Also Conducted By Private Enterprises Such As Construction, Manufacturing, Etc. Are Classified In Their Appropriate Industry.

TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES

Total employment in Transportation, Communications, and Public Utilities was 288,100 in 1970. By 1976, this number will grow to 315,400; in 1980, employment is anticipated to reach 333,700--a 15.8 percent growth-rate during the decade.

The Transportation segment of this industry group will gain 18,200 workers by 1980--an 11.3 percent increase from 1970. Employment advances in Trucking Services and Air Transportation are primarily responsible for the upward movement. As in the sixties, employment reductions occurring in Railroad Transportation and Pipelines will fail to offset growth in other segments of Transportation.

To a certain extent, more productive freight-handling methods and equipment are limiting employment additions; at the same time, however, the constant expansion of the population to suburbia creates a demand for more Local Trucking employment to move the populus. In addition, trade establishments, factories and service-related centers are also migrating to outlying communities, thereby compounding the need for these transportation services. Trucking Service employment will add 12,800 workers during the seventies. These additional Trucking Service workers will account for over 70 percent of the employment gained in the entire Transportation segment between 1970 and 1980.

By 1980, employment in Communications and Public Utilities is predicted to reach 154,600, which is a 21.5 percent increase from 1970. Within the Communications and Public Utilities industry grouping, the Utilities sector will slip to 56.7 percent of the total by 1980, somewhat less than its former preponderance. In 1960, over 62 percent of all employment in the Communications and Public Utilities category was centered in Utilities, and by 1970, the Utilities portion had dropped to 57.9 percent.

Even though Utilities employment is expected to grow at a faster rate in the 1970-1980 decade (19.0 percent) than the previous 1960-1970 decade (14.4 percent), the ratio of Utilities employment to that of total Communications and Public Utilities will still be lower. This paradox is the result of rapid employment growth in the Telephone division of Communications. Between 1970 and 1980, Telephone employment is expected to increase 27.0 percent. The telephone industry's share of the total employment in Communications and Public Utilities will gradually rise from 34.7 percent in 1970 to 36.2 percent in 1980. This growth in the Telephone Communications field is a direct reflection of the growing population and its constant mobility.

In the 1970-1980 decade, the largest net gains will occur in Trucking Service and Telephone Communications; when combined, they will account for 54.2 percent of the total net increase in the entire Transportation, Communications, and Public Utilities Industry.

WHOLESALE AND RETAIL TRADE

In 1970, total Wholesale and Retail Trade employment was 978,300; by 1976, this number should grow to 1,124,300. During the 1970-1980 decade, this industry category will remain the second largest employing unit in the State of Texas. By 1980, 23.3 percent of Texas employment will be concentrated in Wholesale and Retail Trade. The net gain in Trade employment between 1970 and 1980 will be 29.1 percent greater than expansion in the previous 1960-1970 decade. This faster growth can be attributed to an expanding population and increased consumer demand.

In Wholesale Trade, over 29 percent of the total number added were employed in Machinery, Equipment, and Supplies. Employment in this particular portion of Trade grew from 57,000 in

1970 to 79,000 in 1980--a 38.6 percent advance. A rapidly growing market for Texas-made machinery and machine products will more than offset limiting effects on employment resulting from improved warehousing and packaging procedures, as well as new computerized inventory billing systems. The entire Wholesale segment of Trade will increase by 74,000 between 1970 and 1980.

Retail Trade, in contrast to Wholesale Trade, will increase considerably more in actual numbers (168,900) but at a slower growth-rate (23.7 percent). A substantial portion (63.1 percent) of the employment additions in Retail Trade will be in General Merchandise, Food and Dairy Stores, and Eating and Drinking Establishments. Gasoline Service Stations comprise the only segment of Trade expected to experience an employment reduction. The highest percentage increase in a Retail Trade Division will be in Apparel and Accessory Stores, where 15,800 workers will be added between 1970 and 1980--a growth rate of 38 percent.

As Texans grow in number and earn more spending dollars, new and larger shopping malls will appear, thus providing more positions to be filled. Following recent trends to make shopping more convenient, longer business hours and additional workers will be needed. In addition, the expanding population's movement to the suburbs will necessitate extra manpower for new shopping malls housing all types of establishments--eating and drinking places, clothing stores, department stores, supermarkets, etc. They will come into existence in order to meet the demand of a thriving Texas business scene. By 1980, the Wholesale and Retail Trade Industry is expected to employ 1,221,600 of the workers in the Texas labor force.

FINANCE, INSURANCE, AND REAL ESTATE

Total employment numbered 207,700 in Finance, Insurance, and Real Estate in 1970. By 1976, this count will have grown to 253,900, and by 1980, employment in this category is expected to be 284,600--a 10-year gain of 37.0 percent. With this advance, the Finance Industry Group will become the sixth largest concentration of employment in Texas.

In the 1970-1980 decade, the percentage increase of those employed in Real Estate in Texas should substantially surpass the 27.0 percent increase expected in this field at the national level. Texas Real Estate employment is increasing at a faster rate--48.9 percent--than any other part of Finance, Insurance, and Real Estate. A large portion of this sizeable employment advance is attributable to the fact that Texas is rapidly acquiring a role as the vacation center of the South Central States, with numerous resort communities evolving in several areas of the State.

At the same time, a new innovation--the townhouse or condominium--has been introduced to the Texas home market. The prospective buyer's attention is shifting from the single-unit dwelling to multiple-unit dwellings. Despite rising interest rates and climbing construction costs, the multiple-unit dwelling continues to increase its popularity, as it combines the conveniences of leisure apartment-living with the tax benefits of home ownership. The flourish of shopping malls and office buildings has also created the need for the services of those employed in the Real Estate field in order to sell available space.

All sectors of the Finance, Insurance, and Real Estate Industry will experience fair growth, with the exception of Stockbrokers and Investment Companies. This segment is predicted to grow only 5.2 percent between 1970 and 1980 in Texas, while, on the national level, employment in this particular area is forecast to increase faster--50.8 percent--than any other segment of the industry.

The expansion of customer services and the creation and development of more extensive computer operations in the Banking Industry will net a 41.5 percent increase during the seventies. By 1980, total Texas Finance employment will number 113,100 (58.4 percent of which will be found in the Banking segment). The Insurance segment will grow by 32.3 percent over the 1970-1980 decade.

SERVICES AND MISCELLANEOUS

The Services Industry Group will remain the State's largest employing unit during the seventies. In 1980, employment in Services will comprise 29.3 percent of the Texas total. With incomes rising, more money will become available for disposable income. As these expendable funds grow, more services come within the reach of a larger portion of our growing population. The fact that more money is being spent on services affords establishments in this field the opportunity to create more service-oriented jobs. By 1976, Service workers will number 1,381,100; by 1980, total Texas employment in this industry group will reach 1,537,300.

During the seventies, the fastest growing division (percentage-wise) in Services will be the Miscellaneous Business Services sector. This segment encompasses a wide variety of business-related services--Advertising, Business Management, Commercial Research and Development, Computer Programming, Detective and Protective, for example, to name just a few. Employment in these Miscellaneous Business Services will experience a 101.5 percent gain between 1970 and 1980. All sectors of Miscellaneous Business Services, except Advertising and Business Management, will more than double their 1970 employment in ten years. By 1980, employment in this division will reach 161,400.

The largest employing unit of the Services Industry Group, Educational Services, will grow by 27.4 percent by 1980. This section will employ 389,900 workers by the end of the 1970-1980 decade. In the Educational Services category, Elementary and Secondary School employment will account for 71.8 percent of the total number of workers in 1980. Growth in this field is primarily the result of a rapidly expanding school-age population. Likewise, the recent trend for young adults to further their education in colleges and universities has intensified the need for better facilities and more education-related jobs in areas concerned with higher levels of learning. Employment in Colleges and Universities is expected to advance by 22.1 percent during the 1970-1980 decade. The growth of these institutions creates additional job openings for teachers as well as for numerous clerical and maintenance personnel.

The Medical and Other Health Services division is expected to have the largest net gain--100,900 additions--between 1970 and 1980. Over 53 percent of this advance is concentrated in Hospital Service employment. All other sectors--Offices of Physicians, Dentists, and Chiropractors; Convalescent Institutions; Health Practitioners, nec; and Health Services, nec--will experience significant growth-rates, but with smaller net gains. The more widespread utilization of preventive medicine, in addition to new discoveries and cures in the field of Medical Research, are factors that will enhance job growth.

PUBLIC ADMINISTRATION *

During this decade, employment in Public Administration will experience a 12.1 percent gain, numbering 252,600 workers by 1980. In 1970, Public Administration accounted for 5.3 percent of total employment in Texas; by 1980, however, only 4.8 percent of the State's employment will be in this division. The declining ratio of Public Administration to total Employment between 1970 and 1980 is the result of limited growth on both the Federal and State scenes. Public Administration at the Federal level will expand by a mere 2.8 percent; its State counterpart will contribute only 2,600 additional positions--an increase of 13.0 percent. By far the most noteworthy contribution (76.6 percent of the total net gain for the group), however, will come from Local Public Administration, where an increase of 20,900 is expected. In the 1970-1980 decade, extra funds will be dispensed directly to this Local sector for implementation of new "revenue-sharing" Federal programs. These programs, in addition to the services demanded by a growing population, will necessitate the rapid expansion of Local Public Administration employment.

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* This division includes all workers engaged in activities unique to government, such as the legislative, judicial, administrative, and regulatory activities of Federal, State, and Local governments. Those workers engaged in activities also conducted by private enterprises such as Construction, Public Utilities, Educational Institutions, Medical Facilities, etc. are classified in their appropriate industry.

EMPLOYMENT TRENDS BY OCCUPATION

EMPLOYMENT TRENDS BY OCCUPATION

As Texas and the United States continue shifting more and more toward a service-oriented economy, the need for white-collar and service workers will become even greater. By 1980, over 50 percent of Texas' employment will be white-collar workers. (See Chart 3) The various groups comprizing this white-collar segment (Professional, Technical, and Kindred; Managers, Officials, and Proprietors; Sales Workers; and Clerical Workers) have an average expected increase of 32 percent from 1970 to 1980, while the anticipated increase for all occupations during the period is only 22 percent. Only Farm Workers are expected to have an actual reduction in numbers in 1980 from their 1970 level.

In order to identify some factors responsible for anticipated changes in the occupational composition of Texas employment during the 1970-to-1980 period, an analysis of each of the broad occupational groups will be presented. Time and space limitations will necessitate discussion of only the major developments within each group. In addition, reference to manpower requirements resulting from deaths and retirements will be made for each group.

PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS

In 1970, over 572,000 workers were employed in Professional, Technical, and Kindred occupations in Texas. Engineers, Medical Workers, and Teachers accounted for over 50 percent of this major group. While these occupations were the largest numerically, they were not necessarily the fastest-growing ones. By 1980, employment of Professional, Technical, and Kindred workers

is expected to rise 30.3 percent, to 746,500. A sizeable portion of this gain can be attributed to a gradual shift to a service-oriented economy, while the balance may be linked to the increased need for goods and services in Texas caused by a steady growth in population. In addition, there will also be a need for approximately 225,000 workers in Professional, Technical, and Kindred occupations to replace workers lost because of death or retirement.

An ever increasing need for Medical attention has brought about a situation in which more and more of the duties previously reserved for Physicians and Nurses must now be performed by qualified Technicians. The result of this increased demand has been to stimulate growth in the Health Technicians category. Between 1970 and 1980, this group of Medical Workers is expected to expand by 68.4 percent, while Medical Workers Other Than Technicians are anticipated to rise 35.5 percent.

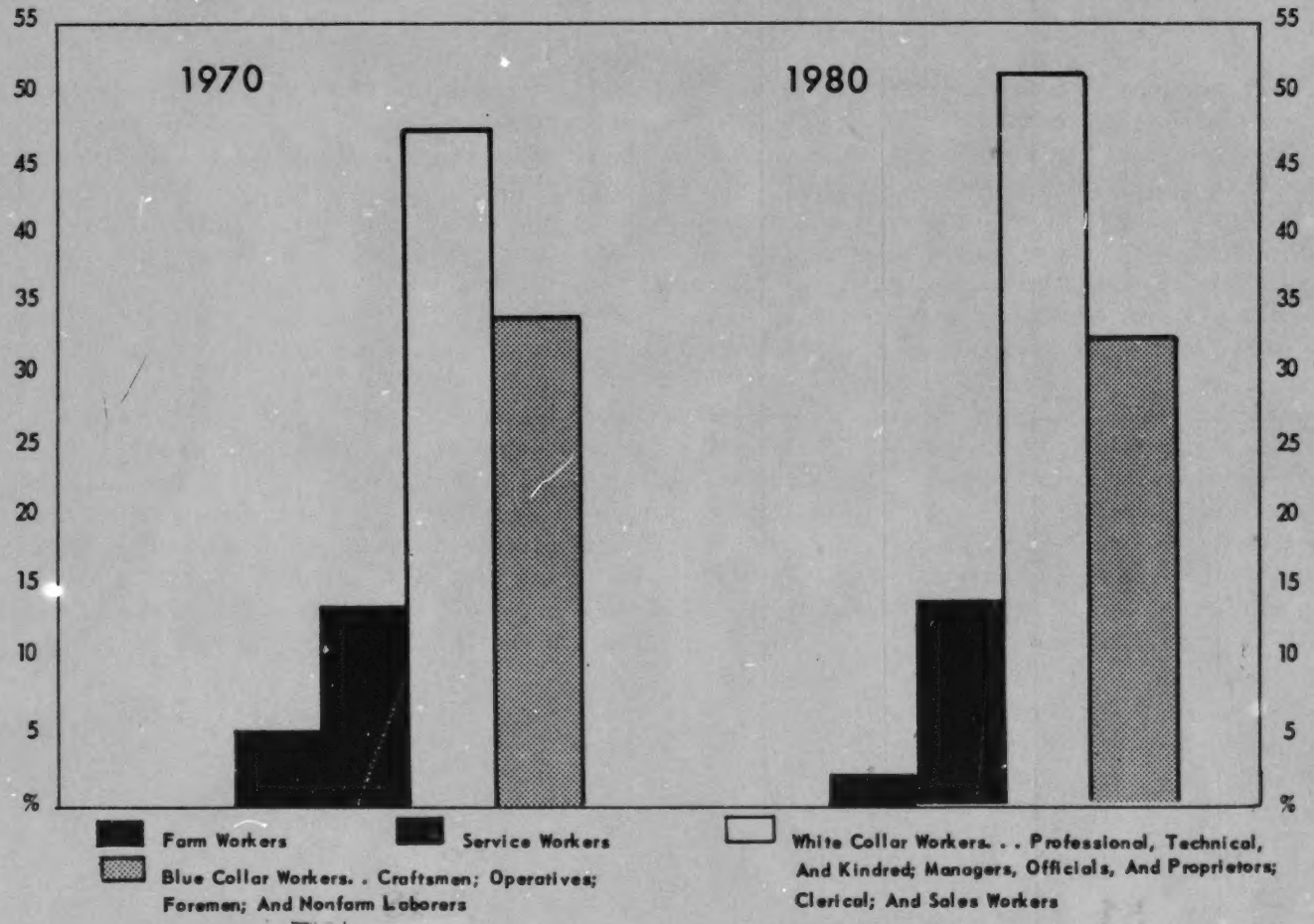
With an increase of 64 percent between 1970 and 1980, the group of professionals known as "Social Scientists" follows closely behind Health Technologists and Technicians in rate of growth during the decade. This spectacular surge to the forefront can be attributed to the newfound importance of Urban Planners, Psychologists, and Economists--occupations formerly relegated to roles in academic institutions and establishments concerned with public administration. These three specific occupations are expected to record gains of 67 percent, 89 percent, and 56 percent, respectively.

Other occupational categories in which expected increases should exceed that for the entire Professional and Technical group include Mathematical Specialists (50%), Engineering and Science Technicians (44%), and Computer Specialists (43%). Teachers, in years past one of the fastest growing of all professions, is expected to net a more modest gain of 14 percent during the 1970-1980 decade.

CHART 3

OCCUPATIONAL SHIFT IN TEXAS

Percent Distribution Of Employment By Broad Occupational Categories, 1970 And 1980



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MANAGERS, OFFICIALS, AND PROPRIETORS

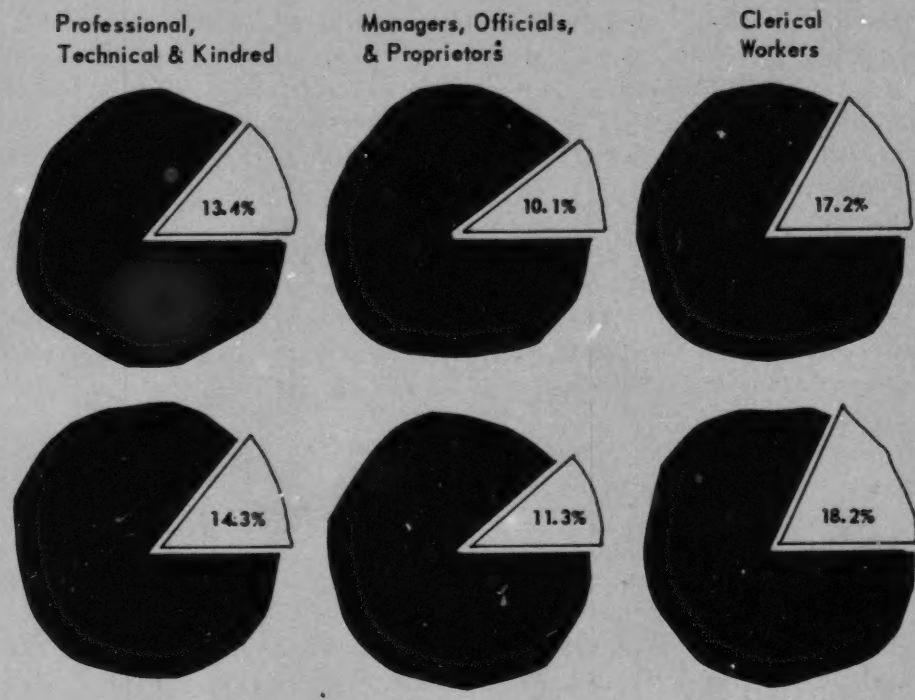
A 37.1 percent gain is expected during the 1970-to-1980 decade in Managers, Officials, and Proprietors, making it the fastest growing of any occupational group. This rate of growth should push employment in these occupations to 591,200 by 1980. Much of this growth can be attributed to a "catch-up" phase in which employers are bringing the number of Managers and Administrators up to a level more in line with non-supervisory personnel. While several of these occupations in the private enterprise sector are showing strong gains, some of their government-related counterparts are experiencing little growth or a decline. In addition to the 160,100 persons needed to meet expansion expectations, some 134,900 Managers, Officials, and Proprietors will be necessary to replace persons leaving the Labor Force for various reasons.

One of the fastest growing occupational groups should be Building Managers and Superintendents, with an anticipated growth rate of 72.7%. Other groups expecting substantial increases are Health Administrators (63.3%), and Bank Officers and Financial Managers (50%). In contrast, some occupations in the Managers, Officials, and Proprietors group are not expected to show strong increases. One such occupational category is Public Administration Officials and Administrators, which will experience only a 1.6 percent increase during the 1970-to-1980 decade. It should also be noted that Postmasters and Mail Supervisors are expected to be the only occupational group in Managers, Officials, and Proprietors recording a loss (-12.5%) during the 10-year period.

CHART 4

EMPLOYMENT IN OCCUPATIONAL GROUPS, 1970-1980

Percent Distribution Showing Significant Gains



	Professional, Technical & Kindred	Managers, Officials, & Proprietors	Clerical Workers
NET CHANGE	+.9%	+1.2%	+1.0%

SALES WORKERS

In 1970, there were 296,700 persons employed as Sales Workers. Their number is expected to climb to 386,600 by 1980. Much of this increase is being brought on by growth in Trade, as it attempts to meet the demands of an expanding population. Other factors are the success and popularity of regional shopping malls and large resort communities. These types of building development rely heavily on salespersons from their infancy, and this need continues throughout the lives of these developments.

While the limited activity in residential development during the mid-seventies has had a sobering effect on some sales operations, it is not expected to have a substantial bearing on the overall ten-year trend. In addition to the 89,900 workers necessary to meet anticipated expansion needs, 141,200 persons will be needed to replace those who retire or die--making the total demand for Sales Workers during the 1970-to-1980 decade 231,000.

CLERICAL AND KINDRED WORKERS

Employment in the Clerical and Kindred Workers category will climb steadily during the seventies to a total of 954,700 by 1980. Manpower needs in this occupational group reflect rather var-

ied trends as a result of our changing technology. While most occupations in this group are anticipating growth, Keypunch Operators and Stenographers are expected to decline in number. Despite overall growth in the Secretarial field (Secretaries, Stenos, and Typists) from 204,400 in 1970 to 281,000 in 1980, some occupations within this category will decline. Secretaries (Legal, Medical, Other) will expand 43.0 percent, with an addition of 66,700 new employees; on the other hand, Stenographers will decrease from 5,900 workers in 1970 to 3,900 in 1980--a 33.9 percent reduction. Employment in Computer and Peripheral Equipment Operators will gain 4,800 workers; this 56.5 percent addition over the 1970-1980 period is the result of increased use of computer technology for speed and accuracy in all types of organizations. As the demand for Computer Operators grows, employment in related occupations--such as Keypunch Operators--will fall. New innovations within the computer field itself (new methods of data entry) will cause a 12.3 percent decline in Keypunch Operators.

In some fields, the demand in a specific occupation has become so great that other occupations, requiring less skill, are being substituted to meet the demands for these positions. In order to satisfy the rapidly growing need for Teachers, for example, Teacher Aides are being utilized to perform the clerical duties related to the Teaching profession. Teacher Aides will increase by 97.4 percent between 1970 and 1980. With this advance, they will number 15,200 by the end of the current decade.

With the need for 220,700 new workers and an additional 405,000 to man jobs left vacant by deaths and retirements, Clerical Workers will continue to be the largest occupational group throughout the 1970-1980 decade. This fact shows clearly the increasing complexity of our economy and the demand for basic Clerical skills needed for daily operations.

CRAFTSMEN, FOREMEN, AND KINDRED WORKERS

Business activity and industrial expansion are two of the principal factors anticipated to influence employment growth in Craftsmen, Foremen, and Kindred Workers between 1970 and 1980. While gradual expansion is expected in this group, faster growth in other major occupational groups will reduce slightly (to 13.3 percent) the share of total occupational employment belonging to Craftsmen, Foremen, and Kindred Workers.

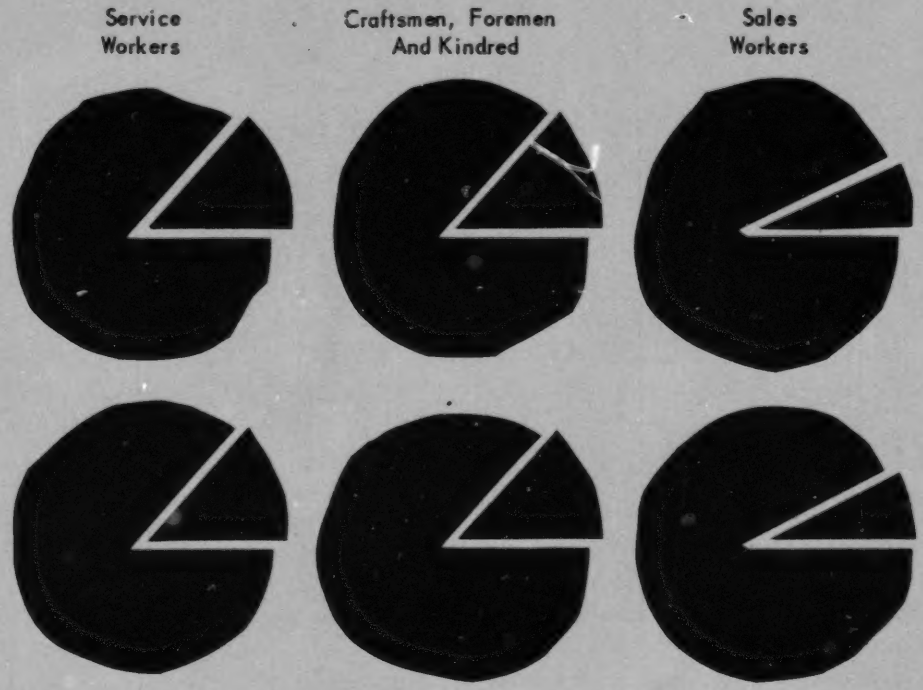
Construction Craftsmen, the largest division within this group, is followed closely by Mechanics, Repairmen, and Installers. The combined net increases of these two divisions will account for the addition of 88,800 workers--73.7 percent of the total net gain for Craftsmen, Foremen, and Kindred Workers. Employment demands for Carpenters; Electricians; Excavating, Grading, and Road Machine Operators; and Plumbers and Pipefitters reveal a favorable market for job-seekers trained in these fields through 1980. Each of these types of Construction Craftsmen will expand more than 20 percent between 1970 and 1980. Promising employment prospects are forecast also for Repairmen in Air Conditioning, Heating, Refrigeration, and Mechanics for Aircraft, Automobiles, and Heavy Equipment. They will contribute 70 percent of the employment added to the total for Mechanics, Repairmen, and Installers by 1980.

Labor-saving, technological innovations will cause minor employment cutbacks affecting some 2,300 workers. Compositors and Typesetters, Locomotive Firemen, and Stationary Engineers are the only occupations in Craftsmen, Foremen, and Kindred Workers that will experience employment reductions during the 1970-1980 decade.

CHART 5

EMPLOYMENT IN OCCUPATIONAL GROUPS, 1970-1980

Percent Distribution Showing Little Change



	Service Workers	Craftsmen, Foremen And Kindred	Sales Workers
NET CHANGE	+.3%	-.1%	+.5%

Overall business activity will demand the addition of 120,500 workers in the Craftsmen, Foremen, and Kindred Worker group between 1970 and 1980. By the end of the current decade, they will number 695,800--a 20.9 percent increase over the 1970-1980 period. Another 128,500 workers will be needed to fill job openings created by deaths and retirements.

OPERATIVES (SEMISKILLED WORKERS)

Employment of Operatives (semiskilled workers) is expected to increase from 630,100 in 1970 to 737,800 by 1980. This growth will be at a considerably slower rate than that for total employment in Texas--17.1 percent compared to 22.4 percent. Because of this slower trend, employment of Operatives will slip from the second largest occupational category in Texas to third place. Although the manpower requirements for occupational growth are slowing, there will be an additional need for some 16,000 semiskilled workers annually to replace those who will withdraw from the labor force because of deaths and retirements.

While most of the occupations found in the Operatives category are related to Manufacturing, over 26 percent of all semiskilled workers in 1970 were working in Transportation-related occupations. By 1980, there should be 198,700 Operatives working in occupations connected with Transportation. In the occupations associated with Manufacturing, the Metalworking Operatives group shows the greatest promise, with a 24.5 percent increase between 1970 and 1980. Packing and Inspecting Workers should also experience satisfactory growth, with an anticipated increase of 20.9 per-

cent during the decade. It should be noted that while some specific occupations are expected to decrease, the only group in its entirety expected to register a loss is the one comprised of Semi-skilled Textile Workers.

SERVICE WORKERS

In 1970, some 576,700 persons were employed as Service workers in Texas. Their occupations ranged from Policeman to Health Trainee to Housekeeper. Almost 100,000 Service Workers were employed in private households as Child Care Workers, Cooks, Housekeepers, Laundresses, and Servants, while, outside of private households, employment in these same occupations accounted for another 195,000 workers.

Health Service Workers are expected to be the fastest growing group of occupations in the Service category. They are expected to rise from 79,000 workers in 1970 to 117,500 by 1980. The only specific occupation in the Health Service Workers group expecting a decrease will be Health Trainees.

Another occupational group expecting substantial growth is the Personal Service Workers. The occupations in this group range from Airline Stewardesses to Ushers in Recreation and Amusement. While Personal Service Workers are anticipated to increase by 43.2 percent during the 1970-to-1980 period, several occupations in the group are expected to decline in employment.

One occupation--Boarding and Lodging Housekeepers--should experience a 75 percent decrease during the 1970-to-1980 decade.

The employment of Service Workers is expected to increase some 25.5 percent between 1970 and 1980. A number of factors contributing to this growth are the growing population, expanding business activities, increasing leisure time, and rising levels of disposable personal income. Another factor to be remembered when considering future growth in Service occupations is that the very nature of Services creates an atmosphere for change and innovation, thus necessitating changes in Service-related occupations. In addition to the anticipated manpower requirements created by expansion, some 295,700 workers will be needed to replace those who will leave the labor force because of death or retirement.

LABORERS, EXCEPT FARM AND MINE

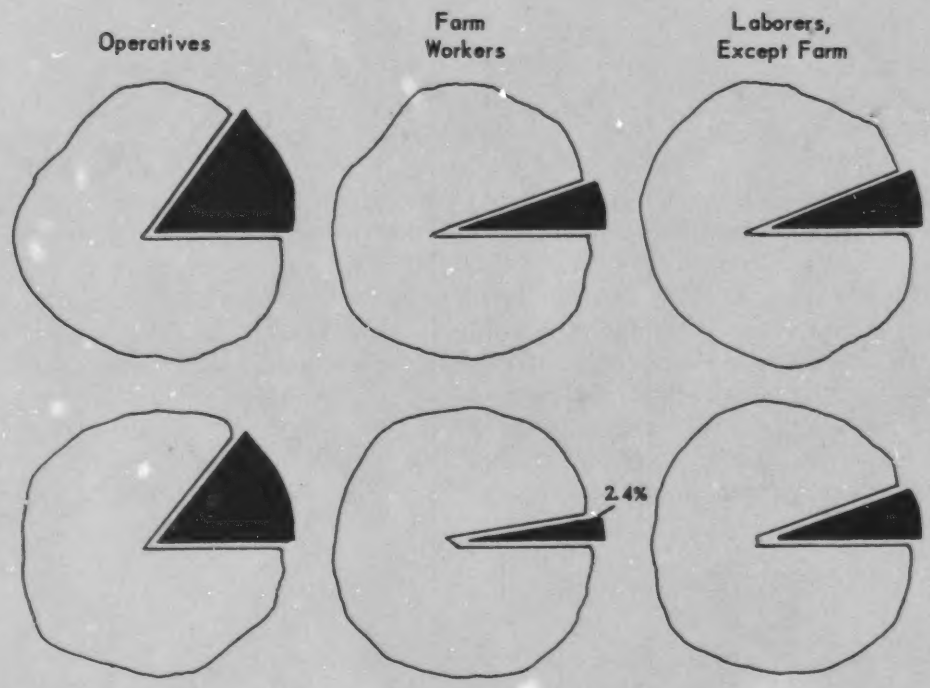
In 1970, there were about 249,800 Laborers in Texas, and in 1980, about 276,100 workers are predicted to be employed as Laborers. By 1980, Construction Laborers will number 67,600; Freight and Material Handlers will grow to 43,500; and Stock Handlers will total 50,000. The advances in these three largest categories will account for 87.1 percent of the total net change for Texas Laborers.

Employment demands for Laborers will be limited by a slackening of business activity in the mid-seventies and be the increased use of mechanized equipment. Needs for additional employment

CHART 6

EMPLOYMENT IN OCCUPATIONAL GROUPS, 1970-1980

Percent Distribution Showing Substantial Loss



	Operatives	Farm Workers	Laborers, Except Farm
NET CHANGE	-.6%	-2.6%	-.5%

will account for only a 10.5 percent increase between 1970 and 1980, but an additional 41,000 workers will be needed to replace those who die or retire.

FARMERS AND FARM WORKERS

Although Texas has been noted for its Agricultural Production over the years, the need for Farmers and Farm Workers is showing a sharp decline. An anticipated 40 percent decrease should reduce their number to 127,200 by 1980. This trend has been brought about partly by tremendous technological advances in Farming. While fewer workers are being needed to work a given amount of acreage, that same acreage can sometimes produce yields far greater than in years past. In addition to the increased productivity brought about by improved techniques and fertilizers, the shift from small independent Farmers to large "Agri-business" farming operations is also playing a part in the overall decline. It should be noted, however, than even though the expansion needs for Farmers and Farm Workers are negative, some 58,000 persons will still be needed during the decade to replace those who withdraw from the labor force because of deaths or retirements.

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METHODOLOGY

METHODOLOGY

Employment level projections to 1980 for 198 separate industries in Texas provided the base information for this publication. Occupational projections to 1980 were then developed by consolidating data from the industry projections, the 1970 Census of Texas, and projected National staffing patterns for 1980. The merging of these three separate sets of data was accomplished through the Interim Manpower Projection Program. Additional information was also obtained from various publications such as Tomorrow's Manpower Needs, published by the U. S. Bureau of Labor Statistics. The 1976 projections were derived through simple linear interpolation of the 1970 to 1980 trend.

INDUSTRY PROJECTIONS

Employment projections were based on annual average wage and salary estimates for the years 1958 through 1970, for each industry. This historical data, combined into broad industry groups, was compared to one or two independent variables (time, national employment, or time and national employment) to identify any existing relationships. These comparisons and determinations were made by computer, using a program designed to enable the computer to select the best relationship based on sound statistical tests. A regression analysis then compared State estimates with either one, or both, of the independent variables.

The regression equations used in the program were either simple least-squares or multiple regressions. The two different equations were employed, since the multiple regression allows the comparison of two independent variables to the dependent one, while the least-squares provides

only a one-on-one comparison of dependent and independent variables. These mathematically derived projections, however, were not accepted at face value. Every projected employment level was reviewed--and revised, when necessary--by staff members, using information from various other studies and their own knowledge of anticipated industry employment changes.

Once the wage and salary projections were accepted, they were submitted to the U. S. Bureau of Labor Statistics for conversion to a total employment concept. This conversion was accomplished, using national data and 1970 State total employment data previously submitted for use in another program. The total employment concept includes, in addition to wage and salary employment, the following classes of workers: self-employed and unpaid family workers, government workers employed in activities carried on by a particular industry, workers on unpaid absences, and multiple job-holders. These total employment projections were given a final review, and revisions were made where necessary.

OCCUPATIONAL PROJECTIONS

The occupational projections developed for this study were derived through a technique relying on the 1970 and 1980 National Industry-Occupation matrices which contain a national occupational profile for each of 260 industries. These profiles consist of ratios showing the percentage of each industry's total employment belonging to each of 469 specific occupations.

The national matrices for 1970 and 1980 were applied to state industry estimates for the respective years. The resulting new matrices were then summed for each occupation over all industries, producing separate sets of occupational employment estimates for 1970 and 1980. The percent change between the two estimates was then calculated and applied to Texas occupational employment data from the 1970 Census, to produce an estimate of 1980 projected employment by

occupation. Once again, all mathematical estimates were reviewed by staff members for consistency and credibility.

REPLACEMENT NEEDS

Where current employment and estimated future employment levels are available, it is a simple matter to estimate the number of jobs created (or abolished) during the study period. "Expansion demand" can be estimated as simply the difference between employment in the base and target years. "Replacement demand" is the number of new workers required to replace those already-employed workers who die or retire. There are other reasons why workers leave their jobs and, thereby, create job vacancies; however, they are for the most part unmeasurable and are not considered in this study.

The method selected to estimate occupational demand created by death and retirements consists of several variables. State employment for each occupation and for twelve age groupings were applied against estimated rates of separation for each age group, by sex, to obtain estimates of separation rates for 1976. These rates were then applied to the interpolated estimates of 1976 employment to yield estimates of annual separations in 1976, by occupation. "Annual expansion demand" and "annual replacement demand" for each occupation were then combined to obtain an estimate of total demand for workers for 1976.

APPENDIX

APPENDIX
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TABLE A

EMPLOYMENT IN TEXAS

BY DETAILED

INDUSTRY

TABLE A

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Total All Industries	4,279,700	4,855,800	5,239,900	960,200	22.4
Agriculture, Forestry and Fisheries	265,600	217,100	186,400	-79,200	-29.8
Agriculture	262,000	214,200	184,000	-78,000	-29.8
Agricultural Production	233,200	190,000	162,800	-70,400	-30.2
Services, Except Horticulture	19,600	16,800	15,000	-4,600	-23.5
Horticulture Services	9,200	7,400	6,200	-3,000	-32.6
Forestry	700	700	700	0	0.0
Fisheries	2,900	2,200	1,700	-1,200	-41.4
Mining	106,700	111,400	116,500	9,800	9.2
Metal Mining	500	500	500	0	0.0
Coal Mining	0	200	400	400	--
Crude Petroleum and Natural Gas	100,100	103,800	108,100	8,000	8.0
Nonmetallic Mining, Quarrying	6,100	6,900	7,500	1,400	23.0
Construction	310,100	357,400	389,100	79,000	25.5
General Building Contractors	82,000	96,400	106,200	24,200	29.5
General Contractors, Except Building	101,600	117,100	127,400	25,800	25.4
Special Trade Contractors	126,500	143,900	155,500	29,000	22.9
Manufacturing	753,100	853,500	918,100	165,000	21.9
Durable Goods	414,600	479,000	521,900	107,300	25.9
Ordnance	13,700	14,200	14,500	800	5.8
Lumber and Wood Products	22,400	26,800	29,800	7,400	33.0
Logging	2,300	3,900	5,100	2,800	121.7

TABLE A (Continued)

EMPLOYMENT[1] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Sawmill, Planing Mill, Mill Works	15,600	17,700	19,000	3,400	21.8
Misc. Wood Products	4,500	5,200	5,700	1,200	26.7
Furniture and Fixtures	17,200	22,500	25,900	8,700	50.6
Stone, Clay, Glass Products	30,300	41,900	49,700	19,400	64.0
Glass and Glass Products	3,100	4,000	4,700	1,600	51.6
Cement, Concrete, Plaster	16,700	24,800	30,200	13,500	80.8
Structural Clay Products	4,500	5,400	6,000	1,500	33.3
Pottery and Related Products	1,000	1,100	1,200	200	20.0
Misc. Nonmetallic, Stone	5,000	6,600	7,600	2,600	52.0
Primary Metal Industries	34,900	35,900	36,600	1,700	4.9
Blast Furnaces, Steel Works	7,900	8,100	8,300	400	5.1
Other Primary Steel	12,300	12,700	12,900	600	4.9
Primary Aluminum Industries	8,500	8,700	8,900	400	4.7
Other Primary Nonferrous	6,200	6,400	6,500	300	4.8
Fabricated Metal Products	54,900	61,400	65,800	10,900	19.9
Cutlery, Other Hardware	1,200	1,400	1,500	300	25.0
Fabricated Metal Products	29,500	33,000	35,300	5,800	19.7
Screw Machine Products	800	800	900	100	12.5
Metal Stamping	1,400	1,600	1,700	300	21.4
Misc. Fabricated Metal Products	22,000	24,600	26,400	4,400	20.0
Machinery, Except Electrical	70,300	84,300	93,600	23,300	33.1
Farm Machinery, Equipment	1,500	1,800	2,000	500	33.3
Construction Machines	36,700	44,100	49,000	12,300	33.5
Metalworking Machinery	3,400	4,100	4,500	1,100	32.4
Office, Accounting Machines	2,100	2,600	2,900	800	38.1
Electronic Computing Equipment	4,200	5,000	5,600	1,400	33.3
Machinery, n.e.c.	22,400	26,700	29,600	7,200	32.1

TABLE A (Continued)

EMPLOYMENT[1] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Electrical Machinery	54,400	72,200	84,100	29,700	54.6
Household Appliances	900	1,100	1,300	400	44.4
Radio, TV, Communication Equip.	20,900	27,800	32,300	11,400	54.5
Electrical Machinery, n.e.c.	32,600	43,300	50,500	17,900	54.9
Transportation Equipment	94,500	93,900	93,400	-1,100	-1.2
Motor Vehicle Equipment	10,200	10,800	11,100	900	8.8
Aircraft and Parts	68,200	65,400	63,600	-4,600	-6.7
Ship, Boat Building, Repair	9,000	10,500	11,400	2,400	26.7
Railroad Equipment	400	400	400	0	0.0
Mobile Dwelling	5,800	5,900	6,000	200	3.4
Cycles, Misc. Transportation Equipment	900	900	900	0	0.0
Professional, Scientific Instruments	13,200	16,200	18,200	5,000	37.9
Scientific Instruments	7,400	9,100	10,300	2,900	39.2
Optical, Health Services Supplies	4,400	5,400	6,100	1,700	38.6
Other Professional, Scientific Equipment	1,400	1,700	1,800	400	28.6
Misc. Manufacturing	8,800	9,700	10,300	1,500	17.0
Nondurable Goods	338,500	374,500	396,200	57,700	17.0
Food and Kindred Products	86,600	88,200	89,300	2,700	3.1
Meat Products	18,100	18,400	18,600	500	2.8
Dairy Products	9,100	8,700	8,500	-600	-6.6
Canning and Preserving	11,000	11,600	12,000	1,000	9.1
Grain-mill Products	8,300	7,600	7,200	-1,100	-13.3
Bakery Products	12,000	11,800	11,600	-400	-3.3

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Confectionery Products	1,900	1,900	1,900	0	0.0
Beverage Industries	13,500	15,500	16,800	3,300	24.4
Misc. Food Preparation	12,700	12,700	12,700	0	0.0
Textile Mill Products	7,500	7,500	7,500	0	0.0
Knitting Mills	1,100	1,100	1,100	0	0.0
Dyeing, Finishing Textiles	0	0	0	0	0.0
Floor Coverings	300	300	300	0	0.0
Yarn, Fabric Mills	5,100	5,100	5,100	0	0.0
Misc. Textile Mill Products	1,000	1,000	1,000	0	0.0
Apparel, Textile Products	62,200	80,400	92,600	30,400	48.9
Apparel and Accessories	57,800	74,700	86,100	28,300	49.0
Misc. Fabricated Products	4,400	5,700	6,500	2,100	47.7
Paper and Allied Products	17,300	19,800	21,500	4,200	24.3
Pulp, Paper, Paperboard Mills	6,000	6,900	7,400	1,400	23.3
Paperboard Containers, Boxes	6,800	7,800	8,500	1,700	25.0
Misc. Paper and Pulp Products	4,500	5,100	5,600	1,100	24.4
Printing and Publishing	44,600	47,200	49,100	4,500	10.1
Newspaper Publishing, Printing	21,800	22,200	22,500	700	3.2
Printing, Publishing Except Newspaper	22,800	25,000	26,600	3,800	16.7
Chemical and Allied Products	62,600	69,800	74,500	11,900	19.0
Industrial Chemicals	34,700	38,600	41,300	6,600	19.0
Plastics, Synthetics	11,400	12,800	13,700	2,300	20.2
Synthetic Fibers	0	0	0	0	0.0
Drugs and Medicines	2,200	2,500	2,600	400	18.2

TABLE A (Continued)

EMPLOYMENT[1] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Soaps and Cosmetics	2,100	2,300	2,400	300	14.3
Paints and Varnishes	3,000	3,400	3,600	600	20.0
Agricultural Chemicals	3,800	4,200	4,500	700	18.4
Misc. Chemicals	5,400	6,000	6,400	1,000	18.5
Petroleum and Coal Products	39,100	39,400	37,200	-1,900	-4.9
Petroleum Refining	36,500	36,600	34,200	-2,300	-6.3
Misc. Petroleum, Coal Products	2,600	2,800	3,000	400	15.4
Rubber, Misc. Plastic Products	13,800	17,800	20,400	6,600	47.8
Rubber Products	5,900	6,100	6,300	400	6.8
Misc. Plastic Products	7,900	11,700	14,100	6,200	78.5
Other Nondurable Goods	4,800	4,400	4,100	-700	-14.6
Tobacco Manufacturing[3]	--	--	--	--	--
Leather Tanning, Finishing	200	200	200	0	0.0
Footwear, Except Rubber	2,600	2,400	2,200	-400	-15.4
All Other Leather Products[3]	--	--	--	--	--
Transportation, Other Public Utilities	288,100	315,400	333,700	45,600	15.8
Transportation, Total	160,900	170,400	179,100	18,200	11.3
Railroads Railway Express	28,600	26,100	24,500	-4,100	-14.3
Local, Interurban Transit	11,800	13,100	14,000	2,200	18.6
Street Railways, Bus Line	8,700	9,700	10,500	1,800	20.7
Taxicab Service	3,100	3,400	3,500	400	12.9
Trucking and Warehousing	68,400	75,200	81,700	13,300	19.4
Trucking Service	60,300	66,800	73,100	12,800	21.2
Warehousing and Storage	8,100	8,400	8,600	500	6.2

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Water Transportation	20,200	21,700	22,800	2,600	12.9
Air Transportation	21,800	23,800	25,400	3,600	16.5
Pipelines	5,700	5,500	5,300	-400	-7.0
Transportation Services	4,400	5,000	5,400	1,000	22.7
Communications, Utilities, Sanitary	127,200	145,000	154,600	27,400	21.5
Communications	53,500	62,900	66,900	13,400	25.0
Telephone (wire and radio)	44,100	52,600	56,000	11,900	27.0
Telegraph, Misc. Communication Services	2,000	2,200	2,300	300	15.0
Radio Broadcasting, TV	7,400	8,100	8,600	1,200	16.2
Utilities, Sanitary Services	73,700	82,100	87,700	14,000	19.0
Electric Light and Power	27,500	30,000	31,700	4,200	15.3
Electric-gas Utilities	2,000	2,200	2,300	300	15.0
Gas, Steam Supply Systems	20,700	22,500	23,700	3,000	14.5
Water Supply	9,100	10,700	11,700	2,600	28.6
Sanitary Services	14,000	16,300	17,800	3,800	27.1
Other Utilities, n.e.c.	400	400	500	100	25.0
Wholesale and Retail Trade	978,300	1,124,300	1,221,600	243,300	24.9
Wholesale Trade	264,500	309,200	338,900	74,400	28.1
Wholesale Except Misc. Wholesale	181,300	209,000	227,400	46,100	25.4
Motor Vehicles and Equipment	21,700	24,700	26,600	4,900	22.6
Drugs, Chemicals, Allied Prod.	17,900	20,700	22,600	4,700	26.3
Dry Goods and Apparel	5,700	7,000	7,800	2,100	36.8

TABLE A (Continued)

EMPLOYMENT[1] IN TEXAS BY DETAILED INDUSTRY
1970, AND PROJECTIONS TO 1976 AND 1980

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INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Food and Related Products	36,300	36,700	37,000	700	1.9
Farm Products - Raw Materials	13,100	16,000	18,000	4,900	37.4
Electrical Goods	18,500	21,000	22,700	4,200	22.7
Hardware, Plumbing	11,100	12,700	13,700	2,600	23.4
Machinery Equipment, Supplies	57,000	70,200	79,000	22,000	38.6
Misc. Wholesale Trade	83,200	100,200	111,500	28,300	34.0
Metals and Minerals, n.e.c.	9,800	11,800	13,300	3,500	35.7
Petroleum Products	15,200	18,200	20,200	5,000	32.9
Scrap and Waste Material	6,700	7,900	8,700	2,000	29.9
Alcoholic Beverages	5,600	6,800	7,500	1,900	33.9
Paper and Its Products	7,000	8,500	9,500	2,500	35.7
Lumber, Construction Materials	11,800	14,300	15,900	4,100	34.7
Wholesale, n.e.c.	27,100	32,700	36,400	9,300	34.3
Retail Trade	713,800	815,100	882,700	168,900	23.7
Building Materials	35,300	38,500	40,600	5,300	15.0
Lumber, Building Materials	25,000	27,200	28,700	3,700	14.8
Hardware and Farm Equipment	10,300	11,300	11,900	1,600	15.5
General Merchandise, Total	155,200	186,700	207,700	52,500	33.8
Department, Mail Order	78,200	98,400	111,900	33,700	43.1
Limited Price Stores	20,200	20,700	21,000	800	4.0
Vending Machine Operators	2,600	3,100	3,400	800	30.8
Direct Selling	23,100	27,000	29,600	6,500	28.1
Misc. Merchandise Stores	31,100	37,500	41,800	10,700	34.4
Food and Dairy Stores	114,300	130,000	140,500	26,200	22.9
Grocery Stores	106,300	121,200	131,200	24,900	23.4

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970 AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Dairy Product Stores	800	800	900	100	12.5
Retail Bakeries	4,100	4,600	4,900	800	19.5
Food Stores, n.e.c.	3,100	3,400	3,500	400	12.9
Auto Dealers, Gas Stations	113,300	115,100	119,300	6,000	5.3
Motor Vehicle Dealers	52,600	53,000	54,700	2,100	4.0
Tire, Battery Accessory	15,400	17,200	18,500	3,100	20.1
Gasoline Service Stations	40,300	39,100	39,700	-600	-1.5
Misc. Vehicle Dealers	5,000	5,800	6,400	1,400	28.0
Apparel and Accessories	41,600	51,900	57,400	15,800	38.0
Apparel, Accessories Stores	33,300	43,200	48,300	15,000	45.0
Shoe Stores	8,300	8,700	9,100	800	9.6
Furniture and Appliances	31,000	33,500	35,300	4,300	13.9
Home Furnishing Stores	20,000	21,600	22,800	2,800	14.0
Appliance, TV, Radio Stores	11,000	11,900	12,500	1,500	13.6
Eating and Drinking Places	141,400	158,100	169,200	27,800	19.7
Misc. Retail Trade Stores	81,700	101,300	112,700	31,000	37.9
Drug Stores	29,300	34,000	39,200	9,900	33.8
Liquor Stores	5,400	5,900	6,200	800	14.8
Farm, Garden Supply Stores	7,100	8,000	8,600	1,500	21.1
Jewelry Stores	8,500	9,500	10,200	1,700	20.0
Fuel and Ice Dealers	4,200	4,800	5,200	1,000	23.8
Retail Florists	4,500	4,600	4,600	100	2.2
Misc. Retail Trade Stores	22,700	34,500	38,700	16,000	70.5
Finance, Insurance, Real Estate	207,700	253,900	284,600	76,900	37.0
Finance, Total	83,600	101,300	113,100	29,500	35.3

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970 AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Banking	46,700	58,400	66,100	19,400	41.5
Credit Agencies	23,400	29,000	32,800	9,400	40.2
Stock Brokers, Investment	13,500	13,900	14,200	700	5.2
Insurance	79,900	95,400	105,700	25,800	32.3
Real Estate, Including Law Insurance	44,200	57,200	65,800	21,600	48.9
Services	1,144,800	1,381,100	1,537,300	392,500	34.3
Hotels and Lodging Places	45,900	59,400	68,400	22,500	49.0
Hotels and Motels	38,700	51,400	59,900	21,200	54.8
Lodging Places, Except Hotels	7,200	8,000	8,500	1,300	18.1
Other Personal Services	95,900	114,100	126,300	30,400	31.7
Laundry, Cleaning	43,200	48,800	52,500	9,300	21.5
Beauty Shops	28,800	35,000	39,200	10,400	36.1
Barber Shops	8,900	10,700	11,900	3,000	33.7
Shoe Repair Shops	1,600	2,100	2,500	900	56.3
Dressmaking Shops	3,000	4,400	5,300	2,300	76.7
Other Personal Services	10,400	13,100	14,900	4,500	43.3
Misc. Business Services	80,100	128,600	161,400	81,300	101.5
Advertising	5,100	5,600	5,900	800	15.7
Business Management Services	6,400	9,800	12,100	5,700	89.1
Commercial R and D	3,100	5,300	6,700	3,600	116.1
Computer Programming	7,900	13,500	17,300	9,400	119.0
Detective and Protective	5,200	8,800	11,200	6,000	115.4
Employment, Temporary Help	11,900	20,000	25,500	13,600	114.3
Services Buildings	17,500	28,600	36,200	18,700	106.9
Other Misc. Services	23,000	37,000	46,500	23,500	102.2

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970 AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Automobile Repair Services	33,400	36,700	38,900	5,500	16.5
Auto Repair	23,900	25,400	26,400	2,500	10.5
Auto Services, Except Repair	9,500	11,300	12,500	3,000	31.6
Other Repair Services	25,200	28,500	30,700	5,500	21.8
Electric Repair Shops	8,500	9,600	10,300	1,800	21.2
Other Repair Services	16,700	18,900	20,400	3,700	22.2
Motion Pictures, Theaters	11,600	14,300	16,100	4,500	38.8
Misc. Entertainment	18,100	22,500	25,400	7,300	40.3
Bowling Alleys, Billiards	3,600	4,600	5,200	1,600	44.4
Misc. Entertainment	14,500	17,900	20,200	5,700	39.3
Medical, Other Health	230,200	291,300	331,100	100,900	43.8
Offices of Physicians	34,500	44,200	50,500	16,000	46.4
Offices of Dentists	12,100	15,500	17,700	5,600	46.3
Offices of Chiropractors	1,300	1,800	2,100	800	61.5
Hospitals	137,200	169,900	191,200	54,000	39.4
Convalescent Institutions	30,700	42,100	49,600	18,900	61.6
Health Practitioners, n.e.c.	1,700	2,300	2,700	1,000	58.8
Health Services, n.e.c.	12,700	15,500	17,300	4,600	36.2
Legal Services	19,300	22,400	24,500	5,200	26.9
Educational Services	306,100	357,200	389,900	83,800	27.4
Elementary, Secondary	214,100	254,300	280,100	66,000	30.8
Colleges and Universities	72,000	81,700	87,900	15,900	22.1
Libraries	2,500	3,000	3,300	800	32.0
Educational Services, n.e.c.	17,500	18,200	18,600	1,100	6.3
Museums, Art Galleries, Zoos	1,000	1,200	1,300	300	30.0

TABLE A (Continued)

EMPLOYMENT[1/] IN TEXAS BY DETAILED INDUSTRY
1970 AND PROJECTIONS TO 1976 AND 1980

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Nonprofit Organizations	91,600	100,200	106,200	14,600	15.9
Religious Organizations	38,600	42,900	45,700	7,100	18.4
Welfare Services	12,800	14,400	15,500	2,700	21.1
Residential Welfare	2,500	2,800	3,000	500	20.0
Nonprofit Membership	37,700	40,100	42,000	4,300	11.4
Private Households	140,900	146,000	149,500	8,600	6.1
Other Professional and Related Services	45,500	58,700	67,600	22,100	48.6
Engineering and Architectural Services	22,500	29,900	34,800	12,300	54.7
Accounting, Auditing	15,700	19,700	22,400	6,700	42.7
Misc. Professional Services	7,300	9,100	10,400	3,100	42.5
Government, Total[4/]	225,300	241,700	252,600	27,300	12.1
Federal Public Administration	134,800	137,100	138,600	3,800	2.8
Postal Services	27,900	28,400	28,700	800	2.9
Federal Public Administration	106,900	108,700	109,900	3,000	2.8
State Public Administration	20,000	21,500	22,600	2,600	13.0
Local Public Administration	70,500	83,100	91,400	20,900	29.6

1/ Total employment less the secondary jobs of multi-jobholders.

(Footnotes continued on next page)

2/ Projections based on relationship to National employment.

3/ Employment figures not published because of non-disclosure restrictions.

4/ Includes workers engaged in activities unique to government. Workers engaged in activities also conducted by private enterprises such as Construction, Public Utilities, Educational Institutions, Medical Facilities, etc. are classified in their appropriate industry.

TABLE B

EMPLOYMENT IN TEXAS

BY OCCUPATION

TABLE B

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Total All Occupations	4,279,700	4,855,800	5,239,900	960,200	22.4
Professional, Technical, and Kindred	572,700	678,000	746,500	173,800	30.3
Engineers, Technical	60,200	71,500	78,700	18,500	30.7
Engineers, Aero-astronautic	5,700	6,800	7,400	1,700	29.8
Engineers, Chemical	4,900	5,100	5,200	300	6.1
Engineers, Civil	9,100	10,600	11,600	2,500	27.5
Engineers, Electrical	13,600	16,900	19,000	5,400	39.7
Engineers, Industrial	6,600	8,400	9,600	3,000	45.5
Engineers, Mechanical	7,500	8,700	9,400	1,900	25.3
Engineers, Metallurgical	500	600	700	200	40.0
Engineers, Mining	300	200	200	-100	-33.3
Engineers, Petroleum	4,400	4,600	4,700	300	6.8
Engineers, Sales	1,800	2,100	2,300	500	27.8
Engineers, Other	5,800	7,500	8,600	2,800	48.3
Life and Physical Scientists	14,100	15,900	17,400	3,300	23.4
Agricultural Scientists	600	600	600	0	0.0
Atmospheric, Space Scientists	300	300	400	100	33.3
Biological Scientists	1,200	1,300	1,400	200	16.7
Chemists	4,600	5,500	6,100	1,500	32.6
Geologists	6,700	7,400	7,800	1,100	16.4
Marine Scientists	100	100	200	100	100.0
Physicists and Astronomers	600	700	800	200	33.3
Life, Physical Scientists, n.e.c.	(N)	(N)	100	--	--

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Mathematical Specialists	1,200	1,600	1,800	600	50.0
Actuaries	200	300	300	100	50.0
Mathematicians	300	400	500	200	66.7
Statisticians	700	900	1,000	300	42.9
Engineers, Science Technicians	49,000	62,200	70,700	21,700	44.3
Agricultural, Biological Technicians, Except Health	1,200	1,600	1,700	500	41.7
Chemical Technicians	6,700	7,000	7,200	500	7.5
Draftsmen	17,000	20,900	23,400	6,400	37.6
Electrical, Electronic Technicians	9,400	12,500	14,500	5,100	54.3
Industrial Engineering Technicians	800	900	1,000	200	25.0
Mathematical Technicians	0	0	0	0	0.0
Mechanical Engineering Technicians	300	300	300	0	0.0
Surveyors	3,900	4,700	5,200	1,300	33.3
Engineering, Science Technicians, nec	9,700	14,300	17,400	7,700	79.4
Medical Workers, Except Technicians	64,200	78,000	87,000	22,800	35.5
Chiropractors	900	1,200	1,400	500	55.6
Dentists	3,800	4,800	5,400	1,600	42.1
Dietitians	1,500	1,900	2,100	600	40.0
Optometrists	800	1,100	1,200	400	50.0
Pharmacists	6,700	7,500	8,100	1,400	20.9
Physicians, Medical and Osteopaths	12,800	14,900	16,300	3,500	27.3
Podiatrists	100	200	200	100	100.0

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Registered Nurses	32,100	38,800	43,300	11,200	34.9
Therapists	4,000	5,600	6,700	2,700	67.5
Veterinarians	1,500	2,000	2,300	800	53.3
Other Medical and Health	(N)	(N)	(N)	--	--
Health Technologists and Technicians	13,300	18,900	22,400	9,100	68.4
Clinical Lab Technologists and Technicians	6,700	9,700	11,500	4,800	71.6
Dental Hygienists	500	800	1,000	500	100.0
Health Record Technologists and Technicians	600	1,100	1,400	800	133.3
Radiologic Technologists and Technicians	2,900	3,600	4,100	1,200	41.4
Other Health Technologists and Technicians	2,600	3,700	4,400	1,800	69.2
Technicians, Except Health	11,800	14,900	17,100	5,300	44.9
Airplane Pilots	4,800	5,900	6,700	1,900	39.6
Air Traffic Controllers	2,000	2,200	2,300	300	15.0
Embalmers	200	200	300	100	50.0
Flight Engineers	400	500	600	200	50.0
Radio Operators	2,000	2,400	2,600	600	30.0
Tool Programers, Numerical	100	100	100	0	0.0
Other Technicians, Except Health	2,100	3,300	4,100	2,000	95.2
Therapy Assistants	200	300	400	200	100.0

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Computer Specialists	14,300	18,100	20,500	6,200	43.4
Computer Programers	9,100	11,200	12,500	3,400	37.4
Computer Systems Analysts	4,400	5,900	6,800	2,400	54.5
Other Computer Specialists	800	1,000	1,200	400	50.0
Social Scientists	3,900	5,400	6,400	2,500	64.1
Economists	2,500	3,300	3,900	1,400	56.0
Political Scientists	(N)	(N)	(N)	--	--
Psychologists	900	1,400	1,700	800	88.9
Sociologists	(N)	(N)	(N)	--	--
Urban and Regional Planners	300	400	500	200	66.7
Other Social Scientists	200	300	300	100	50.0
Teachers	183,200	199,200	209,400	26,200	14.3
Adult Education Teachers	2,800	3,100	3,200	400	14.3
Agriculture Teachers	300	300	300	0	0.0
Art, Drama, Music Teachers	1,700	1,900	2,100	400	23.5
Atmospheric, Earth, Marine Teachers	300	400	500	200	66.7
Biology Teachers	1,100	1,400	1,500	400	36.4
Business, Commerce Teachers	800	1,000	1,100	300	37.5
Chemistry Teachers	800	800	800	0	0.0
Coaches, Physical Ed. Teachers	900	1,000	1,000	100	11.1
Economics Teachers	400	500	500	100	25.0
Education Teachers	300	300	300	0	0.0
Elementary School Teachers	76,200	82,800	87,300	11,100	14.6

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Engineering Teachers	800	800	800	0	0.0
English Teachers	1,900	2,000	2,100	200	10.5
Foreign Language Teachers	800	1,000	1,100	300	37.5
Health Specialties Teachers	1,300	1,900	2,200	900	69.2
History Teachers	700	700	700	0	0.0
Home Economics Teachers	200	200	200	0	0.0
Law Teachers	200	200	300	100	50.0
Mathematics Teachers	1,400	1,600	1,700	300	21.4
Physics Teachers	700	600	600	-100	-14.3
Preschool and Kindergarten Teachers	8,600	9,900	10,800	2,200	25.6
Psychology Teachers	600	800	900	300	50.0
Secondary School Teachers	58,200	60,300	61,600	3,400	5.8
Sociology Teachers	300	400	500	200	66.7
Social Science Teachers, n.e.c.	500	600	700	200	40.0
Misc. College and University Teachers	700	900	1,000	300	42.9
College and University Teachers, n.e.c.	7,900	9,500	10,500	2,600	32.9
Theology Teachers	200	300	300	100	50.0
Trade, Industrial and Technical Teachers	200	300	300	100	50.0
Teachers, n.e.c., Except College and University Teachers	12,400	13,700	14,500	2,100	16.9
Writers, Artists, Entertainers	37,100	45,900	51,700	14,600	39.4
Actors	200	300	300	100	50.0

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Athletes and Kindred Workers	2,900	3,400	3,800	900	31.0
Authors	700	700	800	100	14.3
Dancers	200	200	200	0	0.0
Designers	4,300	5,500	6,300	2,000	46.5
Editors and Reporters	6,000	7,100	7,800	1,800	30.0
Musicians and Composers	5,900	7,000	7,700	1,800	30.5
Painters and Sculptors	4,300	5,500	6,200	1,900	44.2
Photographers	3,400	4,300	4,800	1,400	41.2
Public Relations Men, Writers	4,200	5,200	6,000	1,800	42.9
Radio and TV Announcers	1,200	1,400	1,500	300	25.0
Writers, Artists and Entertainers, n.e.c.	3,800	5,300	6,300	2,500	65.8
Other Professional, Technical and Kindred Workers	120,400	146,400	163,400	43,000	35.7
Accountants	37,900	43,300	46,800	8,900	23.5
Architects	3,500	4,800	5,700	2,200	62.9
Archivists and Curators	200	300	300	100	50.0
Clergymen	15,400	17,000	18,000	2,600	16.9
Religious, Except Clergymen	2,400	2,700	2,800	400	16.7
Farm Management Advisors	400	300	300	-100	-25.0
Foresters, Conservationists	1,300	1,500	1,600	300	23.1
Home Management Advisors	300	300	300	0	0.0
Judges	700	700	700	0	0.0
Lawyers	14,800	17,500	19,300	4,500	30.4
Librarians	5,600	6,400	6,900	1,300	23.2

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Operations, Systems Research	2,900	4,100	4,800	1,900	65.5
Personnel Labor Relations	16,200	23,000	27,500	11,300	69.8
Research Workers, n.e.c.	4,100	5,400	6,300	2,200	53.7
Recreation Workers	2,600	3,300	3,800	1,200	46.2
Social Workers	7,000	8,400	9,300	2,300	32.9
Vocational Education Counselors	5,100	7,400	9,000	3,900	76.5
Managers, Officials, Proprietors	431,100	527,900	591,200	160,100	37.1
Buyers, Sales, Loan Managers	75,800	95,100	107,500	31,700	41.8
Bank, Financial Managers	20,600	26,900	30,900	10,300	50.0
Creditmen	4,600	5,400	5,900	1,300	28.3
Buyers, Shippers, Farm Products	1,900	2,100	2,200	300	15.8
Buyers, Wholesale, Retail	8,700	10,800	12,100	3,400	39.1
Purchasing Agents, Buyers, n.e.c.	10,200	11,900	13,100	2,900	28.4
Sales Manager, Retail Trade	15,100	19,500	22,300	7,200	47.7
Sales Manager, Except Retail Trade	14,700	18,500	21,000	6,300	42.9
Administrators, Public Inspectors	41,000	46,600	50,200	9,200	22.4
Assessors, Controllers, and Treasurers, Local Public Admin.	2,700	2,900	3,000	300	11.1
Construction Inspector, Public	1,000	1,200	1,200	200	20.0
Health Administrators	4,900	6,800	8,000	3,100	63.3
Inspectors, Except Construction and Public	6,300	7,300	8,000	1,700	27.0
Officials and Public Administrators	12,700	12,800	12,900	200	1.6

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Postmasters and Mail Supervisors	1,600	1,500	1,400	-200	-12.5
School Administrators, College	2,000	2,500	2,900	900	45.0
School Administrators, Elementary and Secondary	9,800	11,600	12,800	3,000	30.6
Other Managers, Officials, and Proprietors	314,300	386,200	433,500	119,200	37.9
Funeral Directors	2,200	2,800	3,200	1,000	45.5
Managers, Superintendents, Bldg.	7,700	11,100	13,300	5,600	72.7
Office Managers, n.e.c.	16,000	21,600	25,300	9,300	58.1
Officers, Pilots, Pursers, Ship	2,800	2,800	2,900	100	3.6
Officials of Lodges, Unions	2,500	3,000	3,300	800	32.0
Railroad Conductors	1,500	1,700	1,800	300	20.0
Restaurant, Cafe, and Bar Managers	29,100	30,300	31,100	2,000	6.9
Other Managers and Administrators	252,500	312,900	352,600	100,100	39.6
Sales Workers	296,700	351,500	386,600	89,900	30.3
Advertising Agents, Salesmen	3,300	4,000	4,500	1,200	36.4
Auctioneers	300	400	400	100	33.3
Demonstrators	3,700	4,000	4,100	400	10.8
Hucksters and Peddlers	15,500	17,900	19,500	4,000	25.8
Insurance Agents, Brokers, etc.	25,300	31,100	34,800	9,500	37.5
Newsboys	4,400	4,000	3,600	-800	-18.2
Real Estate Agents, Brokers, etc.	18,500	24,400	28,300	9,800	53.0
Stock and Bond Salesmen	4,700	4,700	4,700	0	0.0

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Sales Representatives, Manufacturing	20,300	23,400	25,500	5,200	25.6
Sales Representatives, Wholesale Trade	42,800	51,800	57,600	14,800	34.6
Sales Clerks, Retail Trade	123,100	143,300	156,100	33,000	26.8
Salesmen, Retail Trade	25,600	30,600	33,800	8,200	32.0
Salesmen, Service and Construction	9,200	11,900	13,700	4,500	48.9
Clerical Workers	734,000	864,800	954,700	220,700	30.1
Stenographers, Typists, and Secretaries	204,400	250,600	281,000	76,600	37.5
Secretaries, Legal	5,300	7,000	8,100	2,800	52.8
Secretaries, Medical	3,100	4,300	5,100	2,000	64.5
Secretaries, Other	146,800	184,100	208,700	61,900	42.2
Stenographers	5,900	4,700	3,900	-2,000	-33.9
Typists	43,300	50,500	55,200	11,900	27.5
Office Machine Operators	32,500	35,700	37,700	5,200	16.0
Bookkeeping, Billing Operators	3,500	4,100	4,400	900	25.7
Calculating Machine Operators	1,600	1,600	1,700	100	6.3
Computer, Peripheral Equipment Operators	8,500	11,400	13,300	4,800	56.5
Duplicating Machine Operators	700	800	900	200	28.6
Keypunch Operators	15,500	14,500	13,600	-1,900	-12.3
Tabulating Machine Operators	300	200	200	-100	-33.3
Other Office Machine Operators	2,400	3,100	3,600	1,200	50.0

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Other Clerical Workers	497,100	578,500	636,000	138,900	27.9
Bank Tellers	12,400	14,800	17,000	4,600	37.1
Billing Clerks	5,600	7,600	9,000	3,400	60.7
Bookkeepers	93,100	104,100	112,000	18,900	20.3
Cashiers	64,500	74,200	81,200	16,700	25.9
Clerical Assistants, Social Welfare Workers	(N)	100	100	--	--
Clerical Supervisors, n.e.c.	8,900	10,100	10,800	1,900	21.3
Collectors, Bill and Account	4,700	6,000	6,800	2,100	44.7
Counter Clerks, Except Food	15,700	21,000	24,600	8,900	56.7
Dispatcher, Starter, Vehicle	3,400	4,100	4,500	1,100	32.4
Enumerators and Interviewers	4,200	4,000	3,900	-300	-7.1
Estimators, Investigators, n.e.c.	17,300	21,000	23,600	6,300	36.4
Expediters, Production Controllers	8,800	10,100	10,900	2,100	23.9
File Clerks	13,200	14,300	15,200	2,000	15.2
Insurance Adjusters, Examiners, and Investigators	5,800	7,200	8,100	2,300	39.7
Library Attendants, Assistants	4,600	5,300	5,700	1,100	23.9
Mail Carriers, Post Office	13,800	13,600	13,600	-200	-1.4
Mail Handler, Except Post Office	6,000	7,200	7,900	1,900	31.7
Messenger and Office Boys	1,800	1,800	1,700	-100	-5.6
Meter Readers, Utilities	2,800	2,900	2,900	100	3.6
Payroll, Time Keeping Clerks	7,700	9,100	9,900	2,200	28.6
Postal Clerks	13,900	13,300	13,100	-800	-5.8
Proofreaders	1,300	1,500	1,700	400	30.8
Real Estate Appraisers	1,200	1,500	1,700	500	41.7

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Receptionists	22,600	26,500	29,100	6,500	28.8
Shipping, Receiving Clerks	22,200	24,300	26,000	3,800	17.1
Statistical Clerks	14,700	16,100	17,100	2,400	16.3
Stock Clerks, Store Keepers	25,500	29,300	32,100	6,600	25.9
Teacher Aides, Except Monitors	7,700	12,200	15,200	7,500	97.4
Telegraph Messengers	100	100	100	0	0.0
Telegraph Operators	700	700	600	-100	-14.3
Telephone Operators	20,700	20,700	20,700	0	0.0
Ticket Station, Express Agents	5,200	6,300	7,200	2,000	38.5
Weighers	1,400	1,500	1,600	200	14.3
Misc. Clerical Workers, n.e.c.	65,600	86,000	100,400	34,800	53.0
Craftsmen, Foremen, Kindred Workers	575,300	648,500	695,800	120,500	20.9
Construction Craftsmen	193,900	223,000	242,700	48,800	25.2
Carpenters	58,200	65,700	70,700	12,500	21.5
Carpenters Apprentices	400	400	500	100	25.0
Brickmasons and Stonemasons	7,600	8,800	9,600	2,000	26.3
Brickmasons and Stonemasons Apprentices	200	200	200	0	0.0
Bulldozer Operators	6,900	8,100	9,000	2,100	30.4
Cement and Concrete Finishers	6,600	8,700	10,100	3,500	53.0
Electricians	24,500	28,900	31,800	7,300	29.8
Electricians Apprentices	1,100	1,300	1,500	400	36.4
Excavating, Grading, Machine Operators	21,300	24,600	26,900	5,600	26.3

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Floor Layers, Except Tile Setters	1,600	1,900	2,100	500	31.3
Painters, Construction, and Maintenance	29,400	31,100	32,300	2,900	9.9
Painter Apprentice	100	100	100	0	0.0
Paperhangers	500	600	700	200	40.0
Plasterers	900	1,000	1,000	100	11.1
Plasterer Apprentice	(N)	(N)	(N)	--	--
Plumbers and Pipefitters	22,900	27,000	29,800	6,900	30.1
Plumbers and Pipefitters Apprentices	600	800	900	300	50.0
Roofers and Slaters	4,600	6,100	7,200	2,600	56.5
Structural Metal Craftsmen	4,500	5,400	5,900	1,400	31.1
Tilesetters	2,000	2,300	2,400	400	20.0
Foremen, n.e.c.	72,100	79,600	84,200	12,100	16.8
Metalworking Craftsmen Except Mechanical	39,900	42,800	45,000	5,100	12.8
Blacksmiths	400	500	500	100	25.0
Boilermakers	2,100	2,400	2,500	400	19.0
Heat Treaters, Annealers, etc.	600	600	600	0	0.0
Forgemen and Hammermen	600	600	700	100	16.7
Job and Die Setters, Metal	600	800	900	300	50.0
Machinists	18,400	19,900	20,900	2,500	13.6
Machinist Apprentice	300	300	300	0	0.0
Millwrights	2,400	2,600	2,800	400	16.7
Molders, Metal	1,400	1,400	1,500	100	7.1

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Molders Apprentice	0	0	0	0	0.0
Pattern and Model Makers	900	900	1,000	100	11.1
Rollers and Finishers, Metal	500	500	600	100	20.0
Sheet Metal Workers, Tinsmiths	8,600	8,900	9,100	500	5.8
Sheet Metal Worker Apprentice	100	200	300	200	200.0
Tool and Diemakers	3,000	3,200	3,300	300	10.0
Tool and Diemakers Apprentice	(N)	(N)	(N)	--	--
Mechanics, Repairmen, Installers	156,600	181,000	196,600	40,000	25.5
Air Conditioning, Heating, Refrigeration	8,500	12,300	14,700	6,200	72.9
Aircraft	12,500	15,600	17,700	5,200	41.6
Automobile Accessories Installers	400	400	400	0	0.0
Automobile Body Repairmen	8,200	8,500	8,700	500	6.1
Automobile Mechanics	51,100	55,700	58,700	7,600	14.9
Automobile Mechanics Apprentice	100	100	200	100	100.0
Data Processing Machine Repairmen	2,100	3,500	4,400	2,300	109.5
Farm Implement	2,500	2,900	3,100	600	24.0
Heavy Equipment Mechanics, Including Diesel	31,800	37,200	40,800	9,000	28.3
Household Appliance Mechanics	8,400	10,200	11,300	2,900	34.5
Loom Fixers	100	200	200	100	100.0
Office Machine Repairmen	3,600	4,400	4,800	1,200	33.3
Radio, Television Repairmen	9,600	10,400	10,800	1,200	12.5
Railroad, Car Shop Repairmen	2,500	2,600	2,600	100	4.0

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Mechanics, Except Automobile, Apprentice	300	400	500	200	66.7
Other Mechanics and Repairmen	14,900	16,600	17,700	2,800	18.8
Printing Trade Craftsmen	16,900	17,700	18,200	1,300	7.7
Bookbinders	1,200	1,300	1,300	100	8.3
Compositors and Typesetters	7,700	7,600	7,500	-200	-2.6
Electrotypers, Stereotypers	400	400	400	0	0.0
Engravers, Except Photoengravers	400	400	500	100	25.0
Photoengravers, Lithographers	1,200	1,500	1,600	400	33.3
Pressmen and Plate Printers	5,700	6,200	6,600	900	15.8
Pressmen and Apprentices	100	100	100	0	0.0
Printing Apprentice, Except Press	200	200	200	0	0.0
Transportation, Public Utilities Craftsmen	25,900	28,300	29,800	3,900	15.1
Electric Power Linemen, Cablemen	5,900	6,600	7,000	1,100	18.6
Locomotive Engineers	1,900	2,000	2,100	200	10.5
Locomotive Firemen	500	500	400	-100	-20.0
Power Station Operators	800	800	800	0	0.0
Telephone Installers, Repairmen	14,200	15,800	16,900	2,700	19.0
Telephone Linemen, Splicers	2,600	2,600	2,600	0	0.0
Other Craftsmen, Kindred Workers	70,000	76,100	79,300	9,300	13.3
Bakers	5,200	5,400	5,500	300	5.8
Cabinet Makers	4,000	4,300	4,500	500	12.5

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Carpet Installers	3,100	3,700	4,100	1,000	32.3
Cranemen, Derrickmen, Hoistmen	6,000	6,800	7,400	1,400	23.3
Decorators, Window Dressers	4,100	4,700	5,000	900	22.0
Dental Laboratory Technicians	1,200	1,400	1,400	200	16.7
Furniture and Wood Finishers	900	1,000	1,000	100	11.1
Furriers	(N)	(N)	(N)	--	--
Glaziers	1,500	1,900	2,100	600	40.0
Inspectors, Log and Lumber	600	700	700	100	16.7
Inspectors, Other	7,500	8,500	9,200	1,700	22.7
Jewelers and Watchmakers	2,000	2,100	2,100	100	5.0
Millers, Grain, Flour, Feed	300	400	400	100	33.3
Motion Picture Projectionists	1,100	1,300	1,300	200	18.2
Opticians, Lens Grinder, Polisher	1,500	2,000	2,200	700	46.7
Piano and Organ Tuners and Repairmen	300	400	400	100	33.3
Shipfitters	500	500	600	100	20.0
Shoe Repairmen	1,500	1,700	1,800	300	20.0
Sign Painters and Letterers	1,500	1,700	1,900	400	26.7
Stationary Engineers	16,000	14,800	14,000	-2,000	-12.5
Stone Cutters, Stone Carvers	200	300	300	100	50.0
Tailor	3,100	3,500	3,800	700	22.6
Upholsterers	4,000	4,700	5,100	1,100	27.5
Craftsmen, Kindred Workers, n.e.c.	3,600	3,900	4,100	500	13.9
Craft Apprentice, n.e.c.	300	400	400	100	33.3

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Operatives	630,100	693,900	737,800	107,700	17.1
Operatives, Except Transportation	463,500	508,200	539,100	75,600	16.3
Semiskilled Metalworking	60,900	69,400	75,800	14,900	24.5
Drill Press Operatives	2,300	2,500	2,700	400	17.4
Furnacemen, Smeltermen, Pourers	2,300	2,600	2,800	500	21.7
Grinding Machine Operatives	4,100	4,600	5,000	900	22.0
Heaters, Metal	100	100	100	0	0.0
Lathe, Milling Machine Operatives	6,200	6,800	7,200	1,000	16.1
Metal Platers	1,400	1,600	1,700	300	21.4
Other Precision Machine Operatives	2,000	2,300	2,700	700	35.0
Punch Stamping Press Operatives	2,900	3,100	3,300	400	13.8
Solderers	500	400	400	-100	-20.0
Welders and Flame Cutters	39,100	45,400	49,900	10,800	27.6
Semiskilled Textile Operatives	3,000	3,000	2,900	-100	-3.3
Carding, Lapping, Combing Operatives	200	200	100	-100	-50.0
Knitters, Loopers, and Toppers	200	200	200	0	0.0
Spinners, Twisters, Winders	800	800	800	0	0.0
Weavers	400	400	400	0	0.0
Other Textile Operatives	1,400	1,400	1,400	0	0.0

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Semiskilled Packing and Inspecting	51,700	58,000	62,500	10,800	20.9
Checkers, Examiners, etc., Manufacturing	21,800	24,900	27,000	5,200	23.9
Graders and Sorters, Manufacturing	1,500	1,800	1,900	400	26.7
Meat Wrappers, Retail Trade	2,500	2,900	3,300	800	32.0
Packer, Wrapper, Except Meat, Produce	23,200	25,600	27,300	4,100	17.7
Produce Grader, Packer, Except Factory, Farm	2,700	2,800	3,000	300	11.1
Other Operatives, Except Transportation	347,900	377,800	397,900	50,000	14.4
Asbestos, Insulation Workers	2,700	3,000	3,200	500	18.5
Assemblers	37,000	40,400	42,600	5,600	15.1
Blasters and Powdermen	300	300	300	0	0.0
Bottling, Canning Operatives	2,600	2,900	3,000	400	15.4
Chainmen, Rodmen, Axmen, Surveying	1,100	1,200	1,300	200	18.2
Clothing Ironers and Pressers	12,600	13,100	13,500	900	7.1
Cutting Operatives, n.e.c.	7,300	8,700	9,600	2,300	31.5
Dressmaker, Seamstress, Except Factory	7,500	8,900	9,900	2,400	32.0
Drillers, Earth	5,300	4,800	4,500	-800	-15.1
Dry Wall Installers, Lathes	3,000	3,900	4,600	1,600	53.3
Dryers	200	300	300	100	50.0

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Filer, Polisher, Sander, Buffer	2,900	2,900	2,900	0	0.0
Garage Workers, Gas Station Attendants	37,400	40,900	43,200	5,800	15.5
Laundry, Dry Cleaning Operatives, n.e.c.	10,800	12,100	13,100	2,300	21.3
Meat Cutters, Butchers, Except Manufacturing	9,900	9,800	9,700	-200	-2.0
Meat Cutters, Butchers	4,300	4,300	4,400	100	2.3
Milleners	100	100	100	0	0.0
Mine Operatives, n.e.c.	22,200	17,700	14,800	-7,400	-33.3
Mixing Operatives	3,600	4,000	4,300	700	19.4
Oilers, Greasers, Except Automobile	2,400	2,400	2,300	-100	-4.2
Painters, Manufacturing Articles	8,900	9,500	9,900	1,000	11.2
Photographic Process Workers	3,600	4,700	5,400	1,800	50.0
Riveters and Fasteners	700	800	800	100	14.3
Sailors and Deckhands	2,700	2,600	2,500	-200	-7.4
Sawyers	4,300	5,100	5,600	1,300	30.2
Sewers and Stitchers	35,800	45,400	51,800	16,000	44.7
Shoemaking Machine Operatives	400	300	300	-100	-25.0
Stationary Firemen	3,300	3,200	3,100	-200	-6.1
Winding Operatives, n.e.c.	1,100	1,400	1,700	600	54.5
Misc. Machine Operatives	57,500	62,800	66,300	8,800	15.3
Operatives, n.e.c.	56,400	60,300	62,900	6,500	11.5

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TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Transport Equipment Operatives	166,600	185,700	198,700	32,100	19.3
Boatmen and Canalmen	400	400	400	0	0.0
Bus Drivers	7,700	8,900	9,700	2,000	26.0
Conductors, Motormen, Urban Rail	(N)	(N)	(N)	--	--
Delivery and Routemen	52,700	61,500	67,000	14,300	27.1
Fork Lift, Tow Motor Operatives	10,200	12,400	13,500	3,300	32.4
Motormen, Mine, Factory, Logging	300	300	300	0	0.0
Parking Attendants	1,800	1,900	2,100	300	16.7
Railroad Brakemen	2,100	2,100	2,200	100	4.8
Railroad Switchmen	3,500	3,600	3,700	200	5.7
Taxicab Drivers, Chauffeurs	5,700	6,000	6,200	500	8.8
Truck Drivers	82,200	88,600	93,600	11,400	13.9
Service Workers	576,700	665,300	724,000	147,300	25.5
Cleaning Service Workers	104,700	129,400	145,900	41,200	39.4
Chambermaid, Maid, Except Private	13,100	17,100	19,700	6,600	50.4
Cleaners and Charwomen	33,300	38,900	42,600	9,300	27.9
Janitors and Sextons	58,300	73,400	83,600	25,300	43.4
Food Service Workers	159,100	164,100	167,600	8,500	5.3
Bartenders	4,300	4,400	4,500	200	4.7
Busboys	5,700	5,500	5,500	-200	-3.5
Cooks, Except Private	53,800	55,800	57,000	3,200	5.9

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Dishwashers	11,600	12,300	12,900	1,300	11.2
Food Counter, Fountain Workers	15,400	14,200	13,400	-2,000	-13.0
Waiters	51,600	53,500	54,700	3,100	6.0
Food Workers, n.e.c., Except Private	16,700	18,400	19,600	2,900	17.4
Health Service Workers	79,000	102,400	117,500	38,500	48.7
Dental Assistants	5,300	6,800	7,900	2,600	49.1
Health Aides, Except Nursing	5,800	8,400	10,200	4,400	75.9
Health Trainees	1,400	800	400	-1,000	-71.4
Lay Midwives	(N)	(N)	(N)	--	--
Nurses Aides, Orderlies	39,700	48,700	54,400	14,700	37.0
Practical Nurses	26,800	37,700	44,600	17,800	66.4
Personal Service Workers	87,500	110,900	125,300	37,800	43.2
Airline Stewardesses	2,000	3,300	4,100	2,100	105.0
Attendant, Recreation, Amusement	2,800	3,300	3,800	1,000	35.7
Attendant, Personal Service, n.e.c.	2,100	2,200	2,400	300	14.3
Baggage Porters and Bellhops	1,200	1,000	900	-300	-25.0
Barbers	10,300	12,100	13,100	2,800	27.2
Boarding, Lodging Housekeepers	400	200	100	-300	-75.0
Bootblacks	400	300	300	-100	-25.0
Child Care Workers, Except Private	28,600	36,100	40,400	11,800	41.3
Elevator Operators	1,200	900	700	-500	-41.7
Hairdressers, Cosmetologists	30,700	41,500	48,000	17,300	56.4

TABLE B (Continued)

EMPLOYMENT[1] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2]	1980[2]	NET	PERCENT
Housekeepers, Except Private	6,400	8,100	9,200	2,800	43.8
Personal Service Apprentices	(N)	(N)	(N)	--	--
School Monitors	300	400	500	200	66.7
Ushers, Recreation, Amusement	500	600	700	200	40.0
Welfare Service Aides	600	900	1,100	500	83.3
Protective Service Workers	47,000	53,800	58,800	11,800	25.1
Crossing Guard, Bridgetenders	1,400	1,500	1,600	200	14.3
Firemen, Fire Protection	9,500	11,400	12,700	3,200	33.7
Guards and Watchmen	17,100	19,200	20,700	3,600	21.1
Marshals and Constables	600	600	700	100	16.7
Policemen and Detectives	16,100	18,500	20,200	4,100	25.5
Sheriffs and Bailiffs	2,300	2,600	2,900	600	26.1
Private Household Workers	99,400	104,700	108,900	9,500	9.6
Child Care Workers	27,900	29,500	30,700	2,800	10.0
Cooks, Private	3,200	3,500	3,800	600	18.8
Housekeepers, Private	7,400	7,900	8,400	1,000	13.5
Laundresses, Private	1,000	900	900	-100	-10.0
Maids, Servants, Private	59,900	62,900	65,100	5,200	8.7
Laborers, Except Farm	249,800	265,500	276,100	26,300	10.5
Animal Caretakers, Except Farm	4,600	4,400	4,200	-400	-8.7
Carpenters, Helpers	12,800	10,500	9,000	-3,800	-29.7

TABLE B (Continued)

EMPLOYMENT[1/] IN TEXAS BY OCCUPATION
1970, AND PROJECTIONS TO 1976 AND 1980

OCCUPATION	ANNUAL AVERAGE EMPLOYMENT			1970-1980 CHANGE	
	1970	1976[2/]	1980[2/]	NET	PERCENT
Construction Laborers, Except Carpenter Helper	60,800	64,900	67,600	6,800	11.2
Fishermen and Oystermen	2,200	1,700	1,300	-900	-40.9
Freight, Material Handlers	37,200	40,900	43,500	6,300	16.9
Garbage Collectors	5,000	6,600	7,700	2,700	54.0
Gardeners, Groundskeepers, Except Farm	35,900	37,100	37,900	2,000	5.6
Longshoremen and Stevedores	5,400	5,600	5,800	400	7.4
Lumbermen, Raftsmen, Woodchoppers	2,400	3,300	3,800	1,400	58.3
Stock Handlers	40,200	46,000	50,000	9,800	24.4
Teamsters	400	300	300	-100	-25.0
Vehicle Washer, Equipment Cleaners	9,200	10,100	10,700	1,500	16.3
Warehousemen, n.e.c.	8,700	8,800	8,800	100	1.1
Other Laborers	25,000	25,300	25,500	500	2.0
Farmers and Farm Workers	213,300	160,400	127,200	-86,100	-40.4
Farmers and Farm Managers	104,100	79,500	64,500	-39,600	-38.0
Farmers (Owners and Tenants)	99,800	74,900	59,300	-40,500	-40.6
Farm Managers	4,300	4,600	5,200	900	20.9
Farm Laborers, Farm Foremen	109,200	80,900	62,700	-46,500	-42.6
Farm Foremen	3,400	2,900	2,800	-600	-17.6
Farm Laborers, Wage Workers	86,100	62,000	47,500	-38,600	-44.8
Farm Laborers, Unpaid Family	19,300	15,600	12,000	-7,300	-37.8
Farm Laborers, Self-employed	400	400	400	0	0.0

(See footnotes on following page.)

1/ Total employment less secondary jobs of multi-jobholders.

2/ Projections developed by applying National Growth Rates to 1970 Census of Texas Occupational Employment.

N/ Does not meet acceptable level of accuracy.

TABLE C

JOB OPENINGS BY OCCUPATION FOR TEXAS

TABLE C

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1] EXPANSION NEEDS 1976	ANNUAL[2] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3] FOR WORKERS 1976
Total All Occupations	96,020	158,780	254,800
Professional, Technical, and Kindred	17,380	22,570	39,950
Engineers, Technical	1,850	1,020	2,870
Engineers, Aero-astronautic	170	80	250
Engineers, Chemical	30	50	80
Engineers, Civil	250	210	460
Engineers, Electrical	540	160	700
Engineers, Industrial	300	120	420
Engineers, Mechanical	190	120	310
Engineers, Metallurgical	20	10	30
Engineers, Mining	-10	10	0
Engineers, Petroleum	30	50	80
Engineers, Sales	50	50	100
Engineers, Others	280	160	440
Life and Physical Scientists	330	260	590
Agricultural Scientists	0	10	10
Atmospheric, Space Scientists	10	10	20
Biological Scientists	20	40	60
Chemists	150	80	230
Geologists	110	110	220
Marine Scientists	10	0	10

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Physicists and Astronomers	20	10	30
Life, Physical Scientists, n. e. c.	10	0	10
Mathematical Specialists	60	40	100
Actuaries	10	10	20
Mathematicians	20	10	30
Statisticians	30	20	50
Engineers, Science Technicians	2,170	860	3,030
Agricultural, Biological Technicians, Except Health	50	40	90
Chemical Technicians	50	90	140
Draftsmen	640	260	900
Electrical, Electronic Technician	510	130	640
Industrial Engineering Technician	20	10	30
Mathematical Technician	0	0	0
Mechanical Engineering Technician	0	0	0
Surveyors	130	70	200
Engineering, Science Technician, n. e. c.	770	260	1,030
Medical Workers, Except Technicians	2,280	3,990	6,270
Chiropractors	50	50	100
Dentists	160	140	300

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Dietitians	60	140	200
Optometrists	40	30	70
Pharmacists	140	260	400
Physicians, Medical and Osteopaths	350	430	780
Podiatrists	10	0	10
Registered Nurses	1,120	2,660	3,780
Therapists	270	250	520
Veterinarians	80	30	110
Other Medical and Health	0	0	0
Health Technologists and Technicians	910	790	1,700
Clinical Lab Technologists and Technicians	480	380	860
Dental Hygienists	50	50	100
Health Record Technologists and Technicians	80	50	130
Radiologic Technologists and Technicians	120	170	290
Other Health Technologists and Technicians	180	140	320
Technicians, Except Health	530	270	800
Airplane Pilots	190	50	240
Air Traffic Controllers	30	30	60

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1] EXPANSION NEEDS 1976	ANNUAL[2] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3] FOR WORKERS 1976
Embalmers	10	10	20
Flight Engineers	20	10	30
Radio Operators	60	80	140
Tool Programers, Numerical	0	0	0
Other Technicians, Except Health	200	70	270
Therapy Assistants	20	20	40
Computer Specialists	620	260	880
Computer Programers	340	180	520
Computer Systems Analysts	240	70	310
Other Computer Specialists	40	10	50
Social Scientists	250	100	350
Economists	140	60	200
Political Scientists	0	0	0
Psychologists	80	30	110
Sociologists	0	0	0
Urban and Regional Planners	20	10	30
Other Social Scientists	10	0	10
Teachers	2,620	9,300	11,920
Adult Education Teachers	40	100	140
Agriculture Teachers	0	0	0
Art, Drama, Music Teachers	40	60	100

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Atmospheric, Earth, Marine Teachers	20	10	30
Biology Teachers	40	30	70
Business, Commerce Teachers	30	30	60
Chemistry Teachers	0	20	20
Coaches, Physical Ed. Teachers	10	20	30
Economics Teachers	10	10	20
Education Teachers	0	10	10
Elementary School Teachers	1,110	4,910	6,020
Engineering Teachers	0	10	10
English Teachers	20	70	90
Foreign Language Teachers	30	40	70
Health Specialties Teachers	90	50	140
History Teachers	0	20	20
Home Economics Teachers	0	10	10
Law Teachers	10	10	20
Mathematics Teachers	30	50	80
Physics Teachers	-10	10	0
Preschool and Kindergarten Teachers	220	490	710
Psychology Teachers	30	20	50
Secondary School Teachers	340	2,460	2,800
Sociology Teachers	20	10	30
Social Science Teachers, n.e.c.	20	20	40
Misc. College and University Teachers	30	30	60
College and University Teachers, n.e.c.	260	270	530

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Theology Teachers	10	0	10
Trade, Industrial and Technical Teachers	10	10	20
Teachers, n.e.c., Except College and University Teachers	210	520	730
Writers, Artists, Entertainers	1,460	1,240	2,700
Actors	10	10	20
Athletes and Kindred Workers	90	80	170
Authors	10	30	40
Dancers	0	20	20
Designers	200	140	340
Editors and Reporters	180	270	450
Musicians and Composers	180	160	340
Painters and Sculptors	190	180	370
Photographers	140	100	240
Public Relations Men, Writers	180	130	310
Radio and TV Announcers	30	20	50
Writers, Artists and Entertainers, n.e.c.	250	100	350
Other Professional, Technical and Kindred Workers	4,300	4,440	8,740
Accountants	890	1,340	2,230

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1] EXPANSION NEEDS 1976	ANNUAL[2] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3] FOR WORKERS 1976
Architects	220	80	300
Archivists and Curators	10	10	20
Clergymen	260	500	760
Religious, Except Clergymen	40	100	140
Farm Management Advisors	-10	0	-10
Foresters, Conservationists	30	20	50
Home Management Advisors	0	20	20
Judges	0	50	50
Lawyers	450	440	890
Librarians	130	400	530
Operations, Systems Research	190	40	230
Personnel Labor Relations	1,130	590	1,720
Research Workers, n.e.c.	220	120	340
Recreation Workers	120	100	220
Social Workers	230	370	600
Vocational Education Counselors	390	260	650
Managers, Officials, Proprietors	16,010	13,490	29,500
Buyers, Sales, Loan Managers	3,170	2,020	5,190
Bank, Financial Managers	1,030	500	1,530
Creditmen	130	130	260
Buyers, Shippers, Farm Products	30	60	90
Buyers, Wholesale, Retail	340	430	770

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Purchasing Agents, Buyers, n.e.c.	290	250	540
Sales Manager, Retail Trade	720	370	1,090
Sales Manager, Except Retail Trade	630	280	910
Administrators, Public Inspectors	920	1,490	2,410
Assessors, Controllers, and Treasurers, Local Public Admin.	30	160	190
Construction Inspector, Public	20	30	50
Health Administrators	310	220	530
Inspectors, Except Construction and Public	170	140	310
Officials and Public Administrators	20	440	460
Postmasters and Mail Supervisors	-20	80	60
School Administrators, College	90	70	160
School Administrators, Elementary and Secondary	300	350	650
Other Managers, Officials, and Proprietors	11,920	9,980	21,900
Funeral Directors	100	70	170
Managers, Superintendents, Bldg.	560	550	1,110
Office Managers, n.e.c.	930	460	1,390
Officers, Pilots, Pursers, Ship	10	50	60
Officials of Lodges, Unions	80	60	140

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Railroad Conductors	30	60	90
Restaurant, Cafe, and Bar Managers	200	840	1,040
Other Managers and Administrators	10,010	7,890	17,900
Sales Workers	8,990	14,120	23,110
Advertising Agents, Salesmen	120	120	240
Auctioneers	10	10	20
Demonstrators	40	150	190
Hucksters and Peddlers	400	530	930
Insurance Agents, Brokers, etc.	950	920	1,870
Newsboys	-80	90	10
Real Estate Agents, Brokers	980	990	1,970
Stock and Bond Salesmen	0	120	120
Sales Representatives, Manufacturing	520	500	1,020
Sales Representatives, Wholesale Trade	1,480	1,230	2,710
Sales Clerks, Retail Trade	3,300	7,770	11,070
Salesmen, Retail Trade	820	1,050	1,870
Salesmen, Service and Construction	450	640	1,090
Clerical Workers	22,070	40,500	62,570
Stenographers, Typists, and Secretaries	7,660	15,790	23,450
Secretaries, Legal	280	350	630

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Secretaries, Medical	200	200	400
Secretaries, Other	6,190	11,340	17,530
Stenographers	-200	320	120
Typists	1,190	3,580	4,770
Office Machine Operators	520	1,610	2,130
Bookkeeping, Billing Operators	90	240	330
Calculating Machine Operators	10	100	110
Computer, Peripheral Equipment Operators	480	190	670
Duplicating Machine Operators	20	40	60
Keypunch Operators	-190	920	730
Tabulating Machine Operators	-10	10	0
Other Office Machine Operators	120	110	230
Other Clerical Workers	13,890	23,100	36,990
Bank Tellers	460	640	1,100
Billing Clerks	340	360	700
Bookkeepers	1,890	5,390	7,280
Cashiers	1,670	3,560	5,230
Clerical Assistants, Social Welfare Workers	10	0	10
Clerical Supervisors, n.e.c.	190	170	360
Collectors, Bill and Account	210	200	410

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Counter Clerks, Except Food	890	850	1,740
Dispatcher, Starter, Vehicle	110	80	190
Enumerators and Interviewers	-30	200	170
Estimators, Investigators, n.e.c.	630	650	1,280
Expediters, Production Controllers	210	210	420
File Clerks	200	1,340	1,540
Insurance Adjusters, Examiners, and Investigators	230	190	420
Library Attendants, Assistants	110	340	450
Mail Carriers, Post Office	-20	260	240
Mail Handler, Except Post Office	190	270	460
Messenger and Office Boys	-10	70	60
Meter Readers, Utilities	10	40	50
Payroll, Time Keeping Clerks	220	370	590
Postal Clerks	-80	390	310
Proofreaders	40	100	140
Real Estate Appraisers	50	50	100
Receptionists	650	1,360	2,010
Shipping, Receiving Clerks	380	480	860
Statistical Clerks	240	700	940
Stock Clerks, Store Keepers	660	720	1,380
Teacher Aides, Except Monitors	750	540	1,290
Telegraph Messengers	0	0	0
Telegraph Operators	-10	30	20

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Telephone Operators	0	1,560	1,560
Ticket Station, Express Agents	200	210	410
Weighers	20	40	60
Misc. Clerical Workers, n.e.c.	3,480	1,730	5,210
Craftsmen, Foremen, Kindred Workers	12,050	12,850	24,900
Construction Craftsmen	4,880	4,450	9,330
Carpenters	1,250	1,650	2,900
Carpenters Apprentices	10	0	10
Brickmasons and Stonemasons	200	150	350
Brickmasons and Stonemasons Apprentices	0	0	0
Bulldozer Operators	210	140	350
Cement and Concrete Finishers	350	150	500
Electricians	730	460	1,190
Electricians Apprentice	40	0	40
Excavating, Grading, Machine Operators	560	380	940
Floor Layers, Except Tile Setters	50	30	80
Painters, Construction, and Maintenance	290	670	960
Painter Apprentice	0	0	0
Paperhangers	20	20	40

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Plasterers	10	30	40
Plasterer Apprentice	0	0	0
Plumbers and Pipefitters	690	600	1,290
Plumbers and Pipefitters Apprentices	30	0	30
Roofers and Slaters	260	80	340
Structural Metal Craftsmen	140	60	200
Tilesetters	40	30	70
Foremen, n.e.c.	1,210	1,870	3,080
Metalworking Craftsmen Except Mechanical	510	750	1,260
Blacksmiths	10	30	40
Boilermakers	40	60	100
Heat Treaters, Annealers, etc.	0	10	10
Forgemen and Hammermen	10	10	20
Job and Die Setters, Metal	30	10	40
Machinists	250	340	590
Machinist Apprentice	0	0	0
Millwrights	40	40	80
Molders, Metal	10	20	30
Molders Apprentice	0	0	0
Pattern and Model Makers	10	20	30
Rollers and Finishers, Metal	10	10	20

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Sheet Metal Workers, Tinsmiths	50	130	180
Sheet Metal Worker Apprentice	20	0	20
Tool and Diemakers	30	70	100
Tool and Diemakers Apprentice	0	0	0
Mechanics, Repairmen, Installers	4,000	2,860	6,860
Air Conditioning, Heating, Refrigeration	620	160	780
Aircrafts	520	260	780
Automobile Accessories Installers	0	10	10
Automobile Body Repairmen	50	80	130
Automobile Mechanics	760	980	1,740
Automobile Mechanics Apprentice	10	0	10
Data Processing Machine Repairmen	230	20	250
Farm Implement	60	40	100
Heavy Equipment Mechanics, Including Diesel	900	560	1,460
Household Appliance Mechanics	290	190	480
Loom Fixers	10	10	20
Office Machine Repairmen	120	20	140
Radio, Television Repairmen	120	180	300
Railroad, Car Shop Repairmen	10	80	90
Mechanic , Except Auto, Apprentice	20	0	20
Other Mechanics and Repairmen	280	270	550

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Printing Trade Craftsmen	130	420	550
Bookbinders	10	60	70
Compositors and Typesetters	-20	200	180
Electrotypers, Stereotypers	0	10	10
Engravers, Except Photoengravers	10	10	20
Photoengravers, Lithographers	40	30	70
Pressmen and Plate Printers	90	110	200
Pressmen and Apprentices	0	0	0
Printing Apprentice, Except Press	0	0	0
Transportation, Public Utilities Craftsmen	390	330	720
Electric Power Linemen, Cablemen	110	60	170
Locomotive Engineers	20	100	120
Locomotive Firemen	-10	10	0
Power Station Operators	0	20	20
Telephone Installers, Repairmen	270	120	390
Telephone Linemen, Splicers	0	20	20
Other Craftsmen, Kindred Workers	930	2,170	3,100
Bakers	30	170	200
Cabinet Makers	50	120	170
Carpet Installers	100	30	130
Cranemen, Derrickmen, Hoistmen	140	100	240

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Decorators, Window Dressers	90	230	320
Dental Laboratory Technicians	20	30	50
Furniture and Wood Finishers	10	30	40
Furriers	0	0	0
Glaziers	60	30	90
Inspectors, Log and Lumber	10	30	40
Inspectors, Other	170	200	370
Jewelers and Watchmakers	10	80	90
Millers, Grain, Flour, Feed	10	10	20
Motion Picture Projectionists	20	50	70
Opticians, Lens Grinder, Polisher	70	70	140
Piano and Organ Tuners and Repairmen	10	20	30
Shipfitters	10	10	20
Shoe Repairmen	30	80	110
Sign Painters and Letterers	40	60	100
Stationary Engineers	-200	440	240
Stone Cutters, Stone Carvers	10	10	20
Tailor	70	180	250
Upholsterers	110	130	240
Craftsmen, Kindred Workers, n.e.c.	50	60	110
Craft Apprentice, n.e.c.	10	0	10

100

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Operatives	10,770	15,780	26,550
Operatives, Except Transportation	7,560	12,770	20,330
Semiskilled Metalworking	1,490	1,020	2,510
Drill Press Operatives	40	40	80
Furnacemen, Smeltermen, Pourers	50	30	80
Grinding Machine Operatives	90	70	160
Heaters, Metal	0	0	0
Lathe, Milling Machine Operatives	100	80	180
Metal Platers	30	20	50
Other Precision Machine Operatives	70	40	110
Punch Stamping Press Operatives	40	50	90
Solderers	-10	20	10
Welders and Flame Cutters	1,080	670	1,750
Semiskilled Textile Operatives	-10	110	100
Carding, Lapping, Combing Operatives	-10	10	0
Knitters, Loopers, and Toppers	0	0	0
Spinners, Twisters, Winders	0	40	40
Weavers	0	20	20
Other Textile Operatives	0	40	40

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1] EXPANSION NEEDS 1976	ANNUAL[2] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3] FOR WORKERS 1976
Semiskilled Packing and Inspecting	1,080	1,800	2,880
Checkers, Examiners, etc., Manufacturing	520	750	1,270
Graders and Sorters, Manufacturing	40	60	100
Meat Wrappers, Retail Trade	80	110	190
Packer, Wrapper, Except Meat, Produce	410	770	1,180
Produce Grader, Packer, Except Factory, Farm	30	110	140
Other Operatives, Except Transportation	5,000	9,840	14,840
Asbestos, Insulation Workers	50	40	90
Assemblers	560	1,320	1,880
Blasters and Powdermen	0	10	10
Bottling, Canning Operatives	40	60	100
Chainmen, Rodmen, Axmen, Surveying	20	10	30
Clothing Ironers and Pressers	90	600	690
Cutting Operatives, n.e.c.	230	170	400
Dressmaker, Seamstress, Except Factory	240	620	860
Drillers, Earth	-80	80	0
Dry Wall Installers, Lathes	160	30	190

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Dryers	10	10	20
Filer, Polisher, Sander, Buffer	0	70	70
Garage Workers, Gas Station Attendants	580	680	1,260
Laundry, Dry Cleaning Operatives, n.e.c.	230	550	780
Meat Cutters, Butchers, Except Manufacturing	-20	260	240
Meat Cutters, Butchers	10	80	90
Milleners	0	0	0
Mine Operatives, n.e.c.	-740	270	-470
Mixing Operatives	70	50	120
Oilers, Greasers, Except Automobiles	-10	40	30
Painters, Manufacturing Articles	100	110	210
Photographic Process Workers	180	150	330
Riveters and Fasteners	10	20	30
Sailors and Deckhands	-20	30	10
Sawyers	130	100	230
Sewers and Stitchers	1,600	2,460	4,060
Shoemaking Machine Operatives	-10	20	10
Stationary Firemen	-20	90	70
Winding Operatives, n.e.c.	60	30	90
Misc. Machine Operatives	880	1,090	1,970
Operatives, n.e.c.	650	790	1,440

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Transport Equipment Operatives	3,210	3,010	6,220
Boatmen and Canalmen	0	10	10
Bus Drivers	200	320	520
Conductors, Motormen, Urban Rail	0	0	0
Delivery and Routemen	1,430	770	2,200
Fork Lift, Tow Motor Operatives	330	100	430
Motormen, Mine, Factory, Logging	0	0	0
Parking Attendants	30	60	90
Railroad Brakemen	10	40	50
Railroad Switchmen	20	60	80
Taxicab Drivers, Chauffeurs	50	210	260
Truckdrivers	1,140	1,440	2,580
Service Workers	14,730	29,570	44,300
Cleaning Service Workers	4,120	5,200	9,320
Chambermaid, Maid, Except Private	660	850	1,510
Cleaners and Charwomen	930	1,250	2,180
Janitors and Sextons	2,530	3,100	5,630
Food Service Workers	850	7,350	8,200
Bartenders	20	170	190
Busboys	-20	120	100
Cooks, Except Private	320	2,590	2,910

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Dishwashers	130	390	520
Food Counter, Fountain Workers	-200	460	260
Waiters	310	2,850	3,160
Food Workers, n.e.c., Except Private	290	770	1,060
Health Service Workers	3,850	4,720	8,570
Dental Assistants	260	400	660
Health Aides, Except Nursing	440	410	850
Health Trainees	-100	80	-20
Lay Midwives	0	0	0
Nurses Aides, Orderlies	1,470	2,350	3,820
Practical Nurses	1,780	1,480	3,260
Personal Service Workers	3,780	5,160	8,940
Airline Stewardesses	210	310	520
Attendant, Recreation, Amusement	100	110	210
Attendant, Personal Service, n.e.c.	30	110	140
Baggage Porters and Bellhops	-30	20	-10
Barbers	280	580	860
Boarding, Lodging Housekeepers	-30	10	-20
Bootblacks	-10	30	20
Child Care Workers, Except Private	1,180	1,020	2,200
Elevator Operators	-50	60	10
Hairdressers, Cosmetologists	1,730	2,420	4,150

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Housekeepers, Except Private	280	420	700
Personal Service Apprentices	0	0	0
School Monitors	20	20	40
Ushers, Recreation, Amusement	20	10	30
Welfare Service Aides	50	40	90
Protective Service Workers	1,180	1,470	2,650
Crossing Guard, Bridgetenders	20	120	140
Firemen, Fire Protection	320	150	470
Guards and Watchmen	360	810	1,170
Marshals and Constables	10	40	50
Policemen and Detectives	410	250	660
Sheriffs and Bailiffs	60	100	160
Private Household Workers	950	5,670	6,620
Child Care Workers	280	1,020	1,300
Cooks, Private	60	210	270
Housekeepers, Private	100	520	620
Laundresses, Private	-10	80	70
Maids, Servants, Private	520	3,840	4,360
Laborers, Except Farm	2,630	4,100	6,730
Animal Caretakers, Except Farm	-40	110	70
Carpenters, Helpers	-380	80	-300

TABLE C (Continued)

JOB OPENINGS BY OCCUPATION FOR TEXAS (1976)

OCCUPATION	ANNUAL[1/] EXPANSION NEEDS 1976	ANNUAL[2/] REPLACEMENT NEEDS 1976	TOTAL DEMAND[3/] FOR WORKERS 1976
Construction Laborers, Except Carpenter Helper	680	860	1,540
Fishermen and Oystermen	-90	30	-60
Freight, Material Handlers	630	470	1,100
Garbage Collectors	270	100	370
Gardeners, Groundskeepers, Except Farm	200	1,070	1,270
Longshoremen and Stevedores	40	100	140
Lumbermen, Raftsmen, Woodchoppers	140	70	210
Stock Handlers	980	710	1,690
Teamsters	-10	10	0
Vehicle Washer, Equipment Cleaners	150	140	290
Warehousemen, .e.c.	10	100	110
Other Laborers	50	250	300
Farmers and Farm Workers	-8,610	5,800	-2,810
Farmers and Farm Managers	-3,960	3,770	-190
Farmers (Owners and Tenants)	-4,050	3,610	-440
Farm Managers	90	160	250
Farm Laborers, Farm Foremen	-4,650	2,030	-2,620
Farm Foremen	-60	100	40
Farm Laborers, Wage Workers	-3,860	1,810	-2,050
Farm Laborers, Unpaid Family	-730	110	-620
Farm Laborers, Self-employed	0	10	10

(See footnotes on following page.)

1/ Annual average estimate developed from 1970-1980 expansion totals.

2/ Based on estimated annual death and retirement rates for selected occupations, by sex, for employed workers in the United States.

3/ Total needs from job expansion and death and retirement.

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